



## Listing of Useful Plants of the World

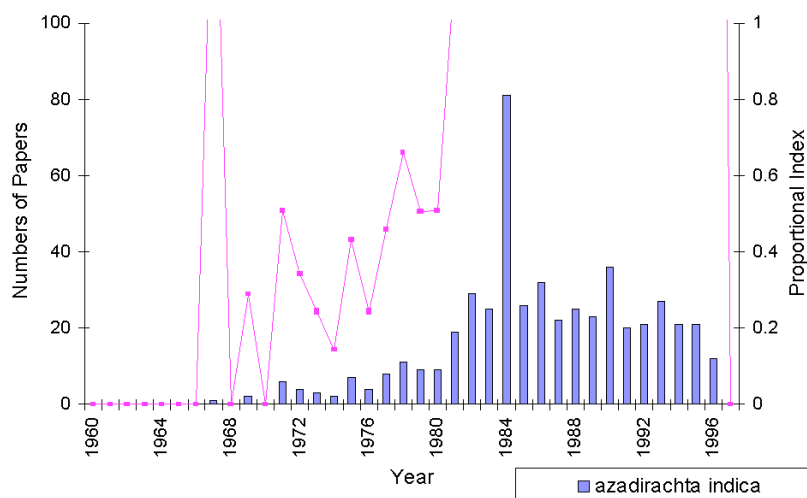
[formerly Listing of Potential New Crops for Australia]

NOTICE: Information on the [background to this Listing](#) is available. The analysis of numbers of papers/mentions over time was completed in 1997, using the Agricola database (1970-1996). Hard copies of the Listing (553 pages; over 4200 new crops listed with the analyses of numbers of papers over time included) are available from the publisher, Dr Rob Fletcher; see [Advice on Publications Available](#).

The references listed below are from the Biological Abstracts database (1988-2000) and are courtesy of SilverPlatter Information. For more information re Silverplatter, go to [www.silverplatter.com](http://www.silverplatter.com).

### *Azadirachta indica* see *Antelaea azadirachta*

#### Analysis of numbers of papers/mentions over time (Agricola database 1970-1996):



Source: AGRICOLA database (1970-1996)

**Common Name(s):**  
**Crop Use(s):**  
**Reference Source(s):**  
**Number of Papers/Mentions: 506**

#### References (Biological Abstracts 1988-2000):

[These references are from the Biological Abstracts database and are courtesy of SilverPlatter Information. For more information re SilverPlatter, go to [www.silverplatter.com](http://www.silverplatter.com). References are listed alphabetically by author within years, with most recent references first; addresses of author(s) have been included when available. To search within this page, we suggest using Find in Page, within the Edit menu of the Web Browser.]

- Akhtar, M. (2000). Evaluation of the nematicidal effects of a neem-based product against root-knot nematode on tomato. *International Pest Control*. [print] Jan. Feb. 42(1): 16-17. {a} Plant Protection Department, Institute of Agriculture, Aligarh Muslim University, Aligarh, 202 002, India
- Amadioha, A. C. (2000). Controlling rice blast in vitro and in vivo with extracts of *Azadirachta indica*. *Crop Protection*. [print] June 19(5): 287-290. {a} Department of Crop Protection, Federal University of Agriculture, Umudike, Umuahia, Abia State, Nigeria
- Benoit, V. F., H. M. Santillana, et al. (2000). Anti-Toxoplasma activity of vegetal extracts used in West African traditional medicine. *Parasite*. March 7(1): 3-7. {a} Laboratoire de Parasitologie-Mycologie, Faculte de Medecine Lariboisiere-Hopital Saint-Louis, 15, rue de l'Ecole de Medecine, F-75006, Paris, France
- Bhanwra, S., J. Singh, et al. (2000). Effect of *Azadirachta indica* (NEEM) leaf aqueous extract on paracetamol-induced liver damage in rats. *Indian Journal of Physiology and Pharmacology*. Jan. 44(1): 64-68. {a} Pt. B.D. Sharma P.G.I.M.S., 5/6J, Medical Enclave, Rohtak, HR, 124 001, India
- Chattopadhyay, R. R. (2000). Possible mechanism of antihyperglycemic effect of *Azadirachta indica* leaf extract: Part V. *Pakistan Journal of Scientific and Industrial Research*. [print] Feb 43(1): 46-49. {a} Biometry Research Unit, Indian Statistical Institute, 203 Barrackpore Trunk Road, Calcutta, 700 035, India
- Ekesi, S. (2000). Effect of volatiles and crude extracts of different plant materials on egg viability of *Maruca vitrata* and *Clavigralla tomentosicollis*. *Phytoparasitica*. [print] October 28(4): 305-310. {a} International Centre for Insect Physiology and Ecology, Nairobi, Kenya
- El, S. M. M. and S. E. D. El (2000). Toxicity of a Neem (*Azadirachta indica*) insecticide to certain aquatic organisms. *Journal of the Egyptian Society of Parasitology*. April 30(1): 221-231. {a} Department of Entomology, Faculty of Science, Cairo University, Giza, Egypt
- Elangovan, A. V., S. V. S. Verma, et al. (2000). Effect of feeding neem (*Azadirachta indica*) kernel meal on growth, nutrient utilization and physiology of Japanese quails (*Coturnix coturnix japonica*). *Asian Australasian Journal of Animal Sciences*. [print] September 13(9): 1272-1277. {a} Nutrition and Feed Technology Division, Central Avian Research Institute, Izatnagar, 243 122, India
- Elhag, E. A. (2000). Deterrent effects of some botanical products on oviposition of the cowpea bruchid *Callosobruchus maculatus* (F.) (Coleoptera: Bruchidae). *International Journal of Pest Management*. [print] April June 46(2): 109-113. {a} College of Agriculture, King Saud University Branch at Gassim, Buraydah, Saudi Arabia
- Gahukar, R. T. (2000). Use of neem products/pesticides in cotton pest management. *International Journal of Pest Management*. [print] April June 46(2): 149-160. {a} Reshimbag, Plot 220, Nagpur, 440009, India
- Gera, M., N. Gera, et al. (2000). Rooting response of root cuttings of some MPT species under low cost mist conditions. *Indian Forester*. [print] February 126(2): 171-174. {a} J and K Forest Deptt., Jammu, J and K, India
- Govindachari, T. R., G. Suresh, et al. (2000). Antifungal activity of some tetranortriterpenoids. *Fitoterapia*. [print] June 71(3): 317-320. {a} Centre for Agrochemical Research, SPIC Science Foundation, 111, Mount Road, Madras, 600 032, India
- Govindachari, T. R., G. Suresh, et al. (2000). Insect antifeedant and growth regulating activities of neem seed oil: The role of major tetranortriterpenoids. *Journal of Applied Entomology*. [print] October 124(7-8): 287-291. {a} Centre of Agrochemical Research, SPIC Science Foundation, 111 Mount Road, Madras, 600 032, India
- Gowda, S. K. and V. R. B. Sastry (2000). Neem (*Azadirachta indica*) seed cake in animal feeding-scope and limitations - Review. *Asian Australasian Journal of Animal Sciences*. May 13(5): 720-728. {a} National Institute of Animal Nutrition and Physiology, Bangalore, 560 030, India
- Gowda, S. K., S. D. Singh, et al. (2000). Effect of neem (*Azadirachta indica*) kernel-meal feeding on internal organs of layers. *Indian Journal of Animal Sciences*. Feb. 70(2): 191-193. {a} National Institute of Animal Nutrition and Physiology, Adugodi, Bangalore, KRN, 560 030, India
- Iqbal, M. Z. and M. Shafiq (2000). Periodical effects of automobile pollution on the growth of some roadside trees. *Ekologia Bratislava*. [print] 19(1): 104-110. {a} Department of Botany, University of Karachi, Karachi, 75270, Pakistan
- Jarvis, A. P. and E. D. Morgan (2000). Analysis of small samples of limonoids of neem (*Azadirachta indica*) using solid phase extraction from tissue culture. *Phytochemical Analysis*. May June 11(3): 184-189. {a} Department of Chemistry, Keele University, Keele, Staffordshire, ST5 5BG, UK
- Joshi, P. C. and J. A. Lockwood (2000). Antifeedent effect of aqueous extract of neem (*Azadirachta indica* A. Juss) leaves on *Oxya velox* F. (Orthoptera: Acrididae). *Journal of Agricultural and Urban Entomology*. [print] January 17(1): 21-26. {a} Association for Applied Acridology International and Entomology Section, Department of Renewable Resources, University of Wyoming, Laramie, WY, 82071-3354, USA

- Juan, A., A. Sans, et al. (2000). Antifeedant activity of fruit and seed extracts of *Melia azedarach* and *Azadirachta indica* on larvae of *Sesamia nonagrioides*. *Phytoparasitica*. [print] October 28(4): 311-319. {a} Area de Proteccio de Conreus, Centre UdL-IRTA, 25198, Lleida, Spain
- Kabaru, J. M. and R. W. Mwangi (2000). Effect of post-treatment temperature on the insecticidal activity of neem, *Azadirachta indica* A. Juss. seed extract on *Schistocerca gregaria* (Forskål): A preliminary report. *Insect Science and its Application*. [print] January March 20(1): 77-79. {a} Department of Zoology, University of Nairobi, Nairobi, Kenya
- Khosla, P., S. Bhanwra, et al. (2000). A study of hypoglycemic effects of *Azadirachta indica* (NEEM) in normal and alloxan diabetic rabbits. *Indian Journal of Physiology and Pharmacology*. Jan. 44(1): 69-74. {a} Department of Pharmacology, Pt. B.D. Sharma P.G.I.M.S., Rohtak, 124 001, India
- Kulkarni, A. R., K. S. Soppimath, et al. (2000). Glutaraldehyde crosslinked sodium alginate beads containing liquid pesticide for soil application. *Journal of Controlled Release*. Jan. 63(1-2): 97-105. {a} Department of Chemistry, Karnatak University, Dharwad, 580 003, India
- Kumar, L. and B. S. Parmar (2000). Effect of emulsion size and shelf life of azadirachtin A on the bioefficacy of neem (*Azadirachta indica* A. Juss) emulsifiable concentrates. *Journal of Agricultural and Food Chemistry*. [print] August 48(8): 3666-3672. {a} Division of Agricultural Chemicals, Indian Agricultural Research Institute, New Delhi, 110012, India
- Kumar, P. P., S. R. Reddy, et al. (2000). Mycorrhizal dependency of some agroforestry tree species. *Indian Forester*. [print] April 126(4): 397-402. {a} Microbiology Section, Botany Department, Kakatiya University, Warangal, AP, India
- Kumar, S. V. and N. C. M. Reddy (2000). Compensatory afforestation plantations under Telugu Ganga project in Andhra Pradesh: Relative performance of different species. *Indian Forester*. [print] April 126(4): 323-332. {a} Guntur Circle, Guntur, AP, India
- Lale, N. E. S. and A. Mustapha (2000). Efficacy and acceptability of neem (*Azadirachta indica* A. Juss) seed oil and pirimiphos-methyl applied in three storage devices for the control of *Callosobruchus maculatus* (F.) (Coleoptera: Bruchidae). *Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz*. [print] Juli 107(4): 399-405. {a} Entomological Section, Institute for Plant Pathology and Plant Protection, Georg-August-University, Grisebachstr. 6, D-37077, Goettingen, Germany
- Lale, N. E. S. and A. Mustapha (2000). Potential of combining neem (*Azadirachta indica* A. Juss) seed oil with varietal resistance for the management of the cowpea bruchid, *Callosobruchus maculatus* (F.). *Journal of Stored Products Research*. [print] July 36(3): 215-222. {a} Department of Crop Science, Faculty of Agriculture, University of Maiduguri, Maiduguri, Nigeria
- Lans, C., T. Harper, et al. (2000). Medicinal plants used for dogs in Trinidad and Tobago. *Preventive Veterinary Medicine*. [print] 45(3-4): 201-220. {a} 17 Cadiz Road, Belmont, Port Of Spain, Trinidad and Tobago
- Ma, D. L., G. Gordh, et al. (2000). Toxicity of biorational insecticides to *Helicoverpa* spp. (Lepidoptera: Noctuidae) and predators in cotton field. *International Journal of Pest Management*. [print] July September 46(3): 237-240. {a} Department of Zoology and Entomology, University of Queensland, Brisbane, QLD, 4072, Australia
- Ma, D. L., G. Gordh, et al. (2000). Survival and development and *Helicoverpa armigera* (Hubner) (Lepidoptera: Noctuidae) on neem (*Azadirachta indica* A. Juss) leaves. *Australian Journal of Entomology*. [print] 39(3): 208-211.
- Majumdar, D., S. Kumar, et al. (2000). Reducing nitrous oxide emission from an irrigated rice field of North India with nitrification inhibitors. *Agriculture Ecosystems and Environment*. [print] November 81(3): 163-169. {a} Division of Environmental Sciences, Nuclear Research Laboratory, Indian Agricultural Research Institute, New Delhi, 110012, India
- Mulatu, B. and T. Gebremedhin (2000). Oviposition-deterrent and toxic effects of various botanicals on the Adzuki bean beetle, *Callosobruchus chinensis* L. *Insect Science and its Application*. [print] January March 20(1): 33-38. {a} Ethiopian Agricultural Research Organisation, Addis Ababa, Ethiopia
- Musabyimana, T., R. C. Saxena, et al. (2000). Powdered neem seed and cake for management of the banana weevil, *Cosmopolites sordidus*, and parasitic nematodes. *Phytoparasitica*. [print] October 28(4): 321-330. {a} Centre de Recherche et de Developpement en Horticulture, Saint-Jean-sur-Richelieu, PQ, J3B 3E6, Canada
- Musalia, L. M., S. Anandan, et al. (2000). Urea-treated neem (*Azadirachta indica* A. juss) seed kernel cake as a protein supplement for lambs. *Small Ruminant Research*. Feb. 35(2): 107-116. {a} Department of Animal Science, Egerton University, Njoro, Kenya
- Owolade, B. F., Y. O. K. Osikanlu, et al. (2000). Efficacy of some indigenous plant extracts on maize seeds infected by *Fusarium moniliforme*. *Crop Research Hisar*. [print] May 19(3): 462-465. {a} Department of Crop Protection and Environmental Biology, University of Ibadan, Ibadan, Nigeria
- Owolade, O. F., A. N. Amusa, et al. (2000). Efficacy of certain indigenous plant extracts against seed-borne infection of *Fusarium moniliforme* on maize (*Zea mays* L.) in South western Nigeria. *Cereal Research Communications*. [print] 28(3): 323-327. {a} Institute of Agricultural Research and Training, Obafemi Awolowo University, Ibadan, Nigeria

- Pal, A., K. Kulshreshtha, et al. (2000). Changes in leaf surface structures of two avenue tree species caused by auto-exhaust pollution. *Journal of Environmental Biology*. Jan. 21(1): 15-21. {a} Environmental Sciences Division, National Botanical Research Institute, Rana Pratap Marg, Lucknow, 226 001, India
- Panda, S. and A. Kar (2000). How safe is neem extract with respect to thyroid function in male mice? *Pharmacological Research*. April 41(4): 419-422. {a} School of Life Sciences, Vigyan Bhawan, Khandwa Road, Indore, 452 017, India
- Papaioannou, S. P., P. D. Markoyiannaki, et al. (2000). Side effects of Neemark (*Azadirachta indica* A. Juss) and two new vegetable oils formulations on *Tetranychus urticae* Koch and its predator *Phytoseiulus persimilis* Athias-Henriot. *Bollettino di Zoologia Agraria e di Bachicoltura*. [print] 32(1): 25-33. {a} Department of Entomology and Agricultural Zoology, Laboratory of Acarology and Agricultural Zoology, Benaki Phytopathological Institute, 8 St. Delta Str., GR 145 61, Kifissia, Athens, Greece
- Poornima, S. and K. Udaiyan (2000). Estimation of simple sugars and polyphenols in neem seeds during storage. *Seed Science and Technology*. [print] 28(2): 517-520. {a} Department of Botany, Bharathiar University, Coimbatore, TN, 641 046, India
- Rajappan, K., C. Ushamalani, et al. (2000). Effect of botanicals on the population dynamics of *Nephotettix virescens*, rice tungro disease incidence and yield of rice. *Phytoparasitica*. April 28(2): 109-113. {a} Dept. of Plant Pathology, Tamil Nadu Agricultural University (TNAU), Coimbatore, 641 003, India
- Sacande, M., J. Buitink, et al. (2000). A study of water relations in neem (*Azadirachta indica*) seed that is characterized by complex storage behaviour. *Journal of Experimental Botany*. March 51(344): 635-643. {a} Centre National de Semences Forestieres (CNSF), Ouagadougou, Burkina-Faso
- Saha, D., J. G. Gavali, et al. (2000). Stomatal studies of few tree species growing in industrial area. *Advances in Plant Sciences*. [print] June 13(1): 209-212. {a} Ecology Lab, Department of Botany, Faculty of Science, M.S. University, Baroda, 390002, India
- SaiRam, M., G. Ilavazhagan, et al. (2000). Anti-microbial activity of a new vaginal contraceptive NIM-76 from neem oil (*Azadirachta indica*). *Journal of Ethnopharmacology*. [print] August 71(3): 377-382. {a} Ministry of Defence, Defence Institute of Physiology and Allied Sciences, Timarpur, Delhi-1, 10054, India
- Saucke, H., F. Dori, et al. (2000). Biological and integrated control of *Plutella xylostella* (Lep., Yponomeutidae) and *Crociodolomia pavonana* (Lep., Pyralidae) in brassica crops in Papua New Guinea. *Biocontrol Science and Technology*. [print] October 10(5): 595-606. {a} Faculty of Agriculture, FB11, University of Kassel, Nordbahnhofstrasse 1a, D-37213, Witzenhausen, Germany
- Schaaf, O., A. P. Jarvis, et al. (2000). Rapid and sensitive analysis of azadirachtin and related triterpenoids from Neem (*Azadirachta indica*) by high-performance liquid chromatography-atmospheric pressure chemical ionization mass spectrometry. *Journal of Chromatography A*. [print] 886(1-2): 89-97. {a} Max-Planck-Institut fuer Chemische Okologie, Carl-Zeiss-Promenade 10, D-07745, Jena, Germany
- Siddiqui, B. S., F. Afshan, et al. (2000). Two insecticidal tetranortriterpenoids from *Azadirachta indica*. *Phytochemistry Oxford*. Feb. 53(3): 371-376. {a} H.E.J. Research Institute of Chemistry, University of Karachi, Karachi, 75270, Pakistan
- Siddiqui, B. S., M. Rasheed, et al. (2000). Biologically active triterpenoids of biogenetic interest from the fresh fruit coats of *Azadirachta indica*. *Tetrahedron*. [print] 56(22): 3547-3551. {a} H.E.J. Research Institute of Chemistry, University of Karachi, Karachi, 75270, Pakistan
- Singh, A., A. K. Jha, et al. (2000). Effect of nutrient enrichment on native tropical trees planted on Singrauli Coalfields, India. *Restoration Ecology*. March 8(1): 80-86. {a} Department of Botany, Banaras Hindu University, Varanasi, 221 005, India
- Singh, G. and B. Singh (2000). Plant growth and nutrient uptake in *Azadirachta indica* planted along Municipal sewage channel in Indian Arid Zone. *Indian Forester*. [print] January 126(1): 22-30. {a} Division of Forest Ecology and Desert Development, Arid Forest Research Institute, Jodhpur, Rajasthan, India
- Singh, K. and D. K. Singh (2000). Toxicity to the snail *Limnaea acuminata* of plant-derived molluscicides in combination with synergists. *Pest Management Science*. [print] October 56(10): 889-898. {a} Department of Zoology, DDU Gorakhpur University, Gorakhpur, UP, 273009, India
- Singh, U. P., B. Prithiviraj, et al. (2000). Control of powdery mildew (*Erysiphe pisi*) of pea (*Pisum sativum*) by combined application of plant growth-promoting rhizobacteria and Neemazal™. *Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz*. Jan. 107(1): 59-66. {a} Department of Mycology and Plant Pathology, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi, 221 005, India
- Varghese, B. and S. C. Naithani (2000). Desiccation induced loss of vigour and viability during storage in neem (*Azadirachta indica* A. Juss) seeds. *Seed Science and Technology*. [print] 28(2): 485-496. {a} Seed Biology Laboratory, School of Life Sciences, Pt. Ravishankar Shukla University, Raipur, 492 010, India
- Vasanthakumar, P., K. Sharma, et al. (2000). Assessment of carcass characteristics of roaster rabbits fed graded levels of neem (*Azadirachta indica*) seed kernel-cake. *Indian Journal of Animal Sciences*. [print] September 70(9): 991-993. {a} Department of

Animal Nutrition, Veterinary College and Research Institute, Namakkal, 637 002, India

Vasanthakumar, P., K. Sharma, et al. (2000). Intake, digestibility and growth of roaster rabbits fed graded dietary levels of neem (*Azadirachta indica*) seed kernel-cake. *Indian Journal of Animal Sciences*. [print] April 70(4): 419-422. {a} Department of Animal Nutrition, Veterinary College and Research Institute, Namakkal, Tamil Nadu, 637 002, India

Agarwal, S. S. and V. K. Singh (1999). Immunomodulators: A review of studies on Indian medicinal plants and synthetic peptides Part I: Medicinal plants. *PINSA B*. June Aug 65(2-3): 179-204. {a} Sanjay Gandhi Post-Graduate Institute of Medical Science, Lucknow, 226 014, India

Ahmed, S. I. and G. Mathur (1999). *Myloccerus tenuicornis* Faust (Coleoptera : Curculionidae), a new pest record on Neem (*Azadirachta indica* A. Juss) from India. *Indian Forester*. June 125(6): 644-646. {a} Division of Forest Protection, Arid Forest Research Institute, Jodhpur, RAJ, India

Aladakatti, R. H. and R. N. Ahamed (1999). Effect of *Azadirachta indica* leaves on rat spermatozoa. *Indian Journal of Experimental Biology*. Dec. 37(12): 1251-1254. {a} Department of Studies and Research in Zoology, Karnatak University, Dharwad, 580 003, India

Arivazhagan, S., S. Balasenthil, et al. (1999). Modulatory effects of garlic and neem leaf extracts on circulating lipid peroxides and antioxidants during N-methyl-N'-nitro-N-nitrosoguanidine-induced gastric carcinogenesis. *Medical Science Research*. Aug. 27(8): 527-529. {a} Department of Biochemistry, Faculty of Science, Annamalai University, Annamalainagar, Tamil Nadu, 608 002, India

Arivazhagan, S., S. Balasenthil, et al. (1999). Chemopreventive potential of garlic and neem during gastric carcinogenesis induced by N-methyl-N'-nitro-N-nitrosoguanidine. *Medical Science Research*. March 27(3): 209-212. {a} Department of Biochemistry, Faculty of Science, Annamalai University, Annamalainagar, Tamil Nadu, 608 002, India

Badam, L., S. P. Joshi, et al. (1999). 'In vitro' antiviral activity of neem (*Azadirachta indica*. A. Juss) leaf extract against group B Coxsackie viruses. *Journal of Communicable Diseases*. June 31(2): 79-90. {a} National Institute of Virology, 20-A, Dr. Ambedkar Road, Pune, 411001, India

Bajaj, S. and B. P. Srinivasan (1999). Investigations into the anti-diabetic activity of *Azadirachta indica*. *Indian Journal of Pharmacology*. April 31(2): 138-141. {a} College of Pharmacy, Pushp Vihar, New Delhi, 110 017, India

Balasenthil, S., S. Arivazhagan, et al. (1999). Chemoprotective effects of neem leaf extract on 7,12-dimethylbenz(a)anthracene (DMBA)-induced hamster buccal pouch carcinogenesis. *Journal of Clinical Biochemistry and Nutrition* 26(1): 9-15. {a} Department of Biochemistry, Annamalai University, Annamalainagar, TN, 608002, India

Balasenthil, S., S. Arivazhagan, et al. (1999). Chemopreventive potential of neem (*Azadirachta indica*) on 7,12-dimethylbenz(a)anthracene (DMBA) induced hamster buccal pouch carcinogenesis. *Journal of Ethnopharmacology*. Nov. 67(2): 189-195. {a} Department of Biochemistry, Faculty of Science, Annamalai University, Annamalainagar, TN, 608 002, India

Banjo, A. D. and B. Mabogunje (1999). Relative efficacy of some plant parts and seeds in the control of *Callosobruchus maculatus* (F.)-A pest of cowpea (*Vigna unguiculata* (F.) Walps.). *Crop Research Hisar*. May 17(3): 395-398. {a} Department of Biological Sciences, Ogun State University, Ago-Iwoye, Nigeria

Bharos, A. M. K. (1999). House sparrow feeding on tender leaves of neem (*Azadirachta indica*). *Journal of the Bombay Natural History Society*. April 96(1): 146. {a} B-101, Gayatri Nagar, Raipur, MP, 492 007, India

Breuer, M. and L. A. De (1999). Field studies on the efficacy of meliaceous plant preparations against the oak processionary, *Thaumetopoea processionea* (L.) (Lepidoptera: Thaumetopoeidae). *Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent*. [print] 64(3a): 311-317. {a} Zoological Institute, Laboratory for Developmental Physiology and Molecular Biology, K.U. Leuven, Naamsestraat 59, B-3000, Leuven, Belgium

Chander, H., A. Nagender, et al. (1999). Laboratory evaluation of plant extracts as repellents to the rust red flour beetle, *Tribolium castaneum* (Herbst), on jute fabric. *International Pest Control* 41(1): 18-20. *Cent. Food Technol. Res. Inst. Reg. Cent., GN Eng. Coll. PO, Gill Road, Ludhiana-141 006, India*

Chattopadhyay, C. (1999). Yield loss attributable to *Alternaria* blight of sunflower (*Helianthus annuus* L.) in India and some potentially effective control measures. *International Journal of Pest Management* 45(1): 15-21. {a} Directorate Oilseeds Res., Rajendranagar, Hyderabad 500030, India

Chattopadhyay, R. R. (1999). Possible mechanism of antihyperglycemic effect of *Azadirachta indica* leaf extract: Part V. *Journal of Ethnopharmacology*. Nov. 67(3): 373-376. {a} Biometry Research Unit, Indian Statistical Institute, 203, Barrackpore Trunk Road, Calcutta, 700 035, India

Chattopadhyay, R. R. (1999). A comparative evaluation of some blood sugar lowering agents of plant origin. *Journal of Ethnopharmacology*. Nov. 67(3): 367-372. {a} Biometry Research Unit, Indian Statistical Institute, 203, Barrackpore Trunk Road, Calcutta, 700 035, India

- Chaudhary, U. B., N. Singh, et al. (1999). Effect of defaunation on the growth rate and nutrient utilization in growing male kids fed tree leaves-based ration. *Indian Journal of Animal Sciences*. Jan. 69(1): 51-53. {a} Central Institute for Research on Goats, Makhdoom, Mathura, UP, 281 122, India
- Chen, C. C., Y. J. Dong, et al. (1999). Deterrent effects of several compounds from neem on oviposition of the apple maggot, *Rhagoletis pomonella* (Walsh). *Plant Protection Bulletin Taichung*. Dec. 41(4): 293-300. {a} Department of Applied Zoology, Taiwan Agricultural Research Institute, Taiwan, Taiwan
- Dai, J., V. A. Yaylayan, et al. (1999). Extraction and colorimetric determination of azadirachtin-related limonoids in neem seed kernel. *Journal of Agricultural and Food Chemistry*. Sept. 47(9): 3738-3742. {a} Department of Food Science, McGill University, 21111 Lakeshore, Sainte Anne de Bellevue, PQ, H93 XV9, Canada
- Das, B. K., S. C. Mukherjee, et al. (1999). Neem (*Azadirachta indica*) extract as an antibacterial agent against fish pathogenic bacteria. *Indian Journal of Experimental Biology*. Nov. 37(11): 1097-1100. {a} Aquatic Animal Health Division, Central Institute of Freshwater Aquaculture, Bhubaneswar, 751002, India
- Das, N. G., D. R. Nath, et al. (1999). Field evaluation of herbal mosquito repellents. *Journal of Communicable Diseases*. [print] December 31(4): 241-245.
- Das, S. and C. B. Kumar (1999). Antifungal effect of five plant extracts on the variants of *Trichophyton rubrum*. *Biocontrol Science*. Sept. 4(2): 83-86. {a} H/74, 2nd phase, Chhend, Rourkela, OR, 769015, India
- Decher, J. and L. K. Bahian (1999). Diversity and structure of terrestrial small mammal communities in different vegetation types on the Accra Plains of Ghana. *Journal of Zoology London*. March 247(3): 395-408. {a} Department of Biology, University of Vermont, Marsh Life Science Building, Burlington, VT, 05405-0086, USA
- Desaeger, J. and M. R. Rao (1999). The root-knot nematode problem in sesbania fallows and scope for managing it in western Kenya. *Agroforestry Systems* 47(1-3): 273-288. {a} International Centre for Research in Agroforestry (ICRAF), Nairobi, Kenya
- Duthie, H. M. A. and J. H. Borden (1999). Treatment of lodgepole pine bark with neem demonstrates lack of repellency or feeding deterrence to the mountain pine beetle, *Dendroctonus ponderosae* Hopkins (Coleoptera: Scolytidae). *Journal of the Entomological Society of British Columbia*. Dec. 96: 21-24. {a} Bugbusters Pest Management Inc., Prince George, BC, V2L 4V7, Canada
- Duthie, H. M. A., J. H. Borden, et al. (1999). Translocation and efficacy of a neem-based insecticide in lodgepole pine using *Ips pini* (Coleoptera: Scolytidae) as an indicator species. *Journal of Economic Entomology* 92(1): 180-186. {a} Bugbusters Pest Management, P.O. Box 1750, Prince George, BC V2L 4V7, Canada
- El, T. A., G. M. H. Satti, et al. (1999). Antiplasmodial activity of selected Sudanese medicinal plants with emphasis on *Maytenus senegalensis* (Lam.) Exell. *Journal of Ethnopharmacology*. March 64(3): 227-233. {a} Department of Biochemistry, Faculty of Medicine, University of Khartoum, Khartoum, Sudan
- Ghosh, D., P. Das, et al. (1999). Effect of neem seed extract (*Azadirachtin*) on growth and reproductive development of *Gesonula punctifrons* (Orthoptera). *Proceedings of the Zoological Society Calcutta*. Oct. 52(2): 80-84. {a} Department of Life Science, Tripura University, Agartala, 799 004, India
- Gopal, M., A. Gupta, et al. (1999). Effect of neem (*Azadirachta indica*)-based granules on growth attributes of soybean (*Glycine max*) on inoculation with rhizobia and fluorescent pseudomonads. *Indian Journal of Agricultural Sciences*. July 69(7): 509-512. {a} Central Plantation Crops Research Institute, Kayangulam, Krishnapuram, 690 533, India
- Govindachari, T. R., G. Gopalakrishnan, et al. (1999). Triterpenoidal constituents of an aqueous extract from neem kernels. *Fitoterapia* . Dec. 70(6): 558-560. {a} Centre for Agrochemical Research, SPIC Science Foundation, 110, Mount Road, Guindy, Madras, 600 032, India
- Govindachari, T. R., R. Malathi, et al. (1999). Isolation of a new tetranortriterpenoid from the uncrushed green leaves of *Azadirachta indica*. *Phytochemistry Oxford*. Nov. 52(6): 1117-1119. {a} Centre for Agrochemical Research, SPIC Science Foundation, 111 Mount Road, Madras, 600 032, India
- Govindachari, T. R., G. Suresh, et al. (1999). Antifungal activity of *Azadirachta indica* leaf hexane extract. *Fitoterapia* . Aug. 70(4): 417-420. {a} Centre for Agrochemical Research, SPIC Science Foundation, 110, Mount Road, Madras, 600 032, India
- Hassan, E. (1999). The insecticidal effects of neem seed kernel extract on eggs and larvae of *Helicoverpa armigera* (Hubner). *Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz*. Sept. 106(5): 523-529. {a} School of Land and Food, University of Queensland, Gatton College, Gatton, QLD, Australia
- Hein, D. F. and H. E. Hummel (1999). Extraction of *Azadirachta indica* ingredients: Comparison of soxhlet reflux extractor, tissue mixer, and accelerated solvent extraction (ASE 200). *Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent*. [print] 64(3a): 185-195. {a} Institute for Phytopathology and Applied Zoology Biological and Biotechnical Plant Protection, Justus-Liebig-University, Ludwigstrasse 21 B, 35390, Giessen, Germany

Hein, D. F., H. E. Hummel, et al. (1999). Structure activity relationships in azadirachtin A derivatives: Feeding activity and degree of efficiency tested on *Epilachna varivestis* larvae. *Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent*. [print] 64(3a): 197-204. {a} Institute for Phytopathology and Applied Zoology, Biological and Biotechnical Plant Protection, Justus-Liebig-University, Ludwigstr. 21 B, 35390, Giessen, Germany

Hore, S. K., S. K. Maiti, et al. (1999). Effect of subacute exposure to neem (*Azadirachta indica*) leaf extract in rats. *Indian Veterinary Journal*. Nov. 76(11): 1011-1012. {a} Department of Pharmacology and Toxicology, College of Vety. Sci. and A.H., Anjora, Durg, MP, 491001, India

Jantan, I., Z. M. Zaki, et al. (1999). Evaluation of smoke from mosquito coils containing Malaysian plants against *Aedes aegypti*. *Fitoterapia*. June 70(3): 237-243. {a} Department of Pharmacy, Faculty of Allied Health Sciences, Universiti Kebangsaan Malaysia, Jalan Raja Muda Abdul Aziz, 50300, Kuala Lumpur, Malaysia

Jarvis, A. P., E. D. Morgan, et al. (1999). Rapid separation of triterpenoids from Neem seed extracts. *Phytochemical Analysis* 10(1): 39-43. {a} Dep. Chem., Keele Univ., Staffordshire ST5 SBG, UK

Kadiri, S., A. Arije, et al. (1999). Traditional herbal preparations and acute renal failure in South West Nigeria. *Tropical Doctor*. Oct. 29(4): 244-246. {a} Department of Medicine, University College Hospital, Ibadan, Nigeria

Karade, V. M. and D. M. Sawant (1999). Screening of various plant extracts against *Alternaria alternata* (Fr.) Keissler. *Journal of Maharashtra Agricultural Universities*. [print] September 24(3): 311-312. {a} Mahatma Phule Krishi Vidyapeeth, Rahuri, 413 722, India

Karunaichamy, K., K. Paliwal, et al. (1999). Biomass and nutrient dynamics of mistletoe (*Dendrophthoe falcata*) and neem (*Azadirachta indica*) seedlings. *Current Science Bangalore*. March 76(6): 840-842. {a} Department of Plant Sciences, School of Biological Sciences, Madurai Kamaraj University, Madurai, 625 021, India

Kreutzweiser, D. P., S. S. Capell, et al. (1999). Acute lethal and sublethal effects of a neem-based insecticide on nontarget aquatic insects in stream channels. *Bulletin of Environmental Contamination and Toxicology*. Sept. 63(3): 365-371. {a} Great Lakes Forestry Centre, Canadian Forest Service, 1219 Queen Street East, Sault Sainte Marie, ON, P6A 5M7, Canada

Kumar, K. and A. K. Goel (1999). Frequently used ethno-medicinal plants of Bihar. *Journal of Economic and Taxonomic Botany*. [print] September 23(2): 645-649. {a} National Botanical Research Institute, Lucknow, Uttar Pradesh, 226 001, India

Kumar, S. and K. Gopal (1999). Screening of plant species for inhibition of bacterial population of raw water. *Journal of Environmental Science and Health Part A Toxic Hazardous Substances and Environmental Engineering*. April 34(4): 975-987. {a} Aquatic Toxicology Division, Industrial Toxicology Research Centre, Mahatma Gandhi Marg, Lucknow, UP, 226 001, India

Kundu, S. K. (1999). The mating system and genetic significance of polycarpy in the neem tree (*Azadirachta indica*). *Theoretical and Applied Genetics*. Nov. 99(7-8): 1216-1220. {a} Department of Plant Biology, University of Helsinki, FIN-00014, Helsinki, Finland

Kundu, S. K. (1999). Comparative analysis of seed morphometric and allozyme data among four populations of neem (*Azadirachta indica*). *Genetic Resources and Crop Evolution*. Dec. 46(6): 569-577. {a} Department of Plant Biology, Helsinki University, FIN-00014, Helsinki, Finland

Kundu, S. K. and P. M. A. Tigerstedt (1999). Variation in net photosynthesis, stomatal characteristics, leaf area and whole-plant phytomass production among ten provenances of neem (*Azadirachta indica*). *Tree Physiology* 19(1): 47-52. Dep. Plant Biol., P.O. Box 27, Univ. Helsinki, FIN-00014 Helsinki, Finland

Kuruvilla, T., P. Komaraiah, et al. (1999). Enhanced secretion of azadirachtin by permeabilized margosa (*Azadirachta indica*) cells. *Indian Journal of Experimental Biology* 37(1): 89-91. {a} Biochemical Environ. Engineering Lab., Indian Inst. Chemical Technology, Hyderabad 500 007, India

Laghmich, A., U. Dutta, et al. (1999). Insulinotropic action of *Azadirachta indica* leaf and bark extracts: Comparison with azadirachtin. *Medical Science Research*. Oct. 27(10): 711-712. {a} Laboratory of Experimental Medicine, Brussels Free University, 808 Route de Lennik, B-1070, Brussels, Belgium

Lale, N. E. S. and H. T. Abdulrahman (1999). Evaluation of neem (*Azadirachta indica* A. Juss) seed oil obtained by different methods and neem powder for the management of *Callosobruchus maculatus* (F.) (Coleoptera: Bruchidae) in stored cowpea. *Journal of Stored Products Research* 35(2): 135-143. {a} Department of Crop Science, Faculty of Agriculture, University of Maiduguri, Maiduguri, Nigeria

Madyastha, K. M. and K. Venkatakrishnan (1999). Biocatalyst-mediated expansion of ring D in azadirachtin, a potent insect antifeedant from *Azadirachta indica*. *Tetrahedron Letters*. July 40(28): 5243-5246. {a} Department of Organic Chemistry, Indian Institute of Science, Bangalore, 560012, India

Mukherjee, S., S. Garg, et al. (1999). Early post implantation contraceptive effects of a purified fraction of neem (*Azadirachta indica*) seeds, given orally in rats: Possible mechanisms involved. *Journal of Ethnopharmacology*. Nov. 67(3): 287-296. {a} Cell

and Molecular Biology Department, Northwestern University Medical School, 303 East Chicago Avenue, Ward 7-342, Chicago, IL, 60611, USA

Mulla, M. S. and T. Su (1999). Activity and biological effects of neem products against arthropods of medical and veterinary importance. *Journal of the American Mosquito Control Association*. June 15(2): 133-152. {a} Department of Entomology, University of California, Riverside, CA, 92521-0314, USA

Murugan, K. and D. Jeyabalan (1999). Effect of certain plant extracts against the mosquito, *Anopheles stephensi* Liston. *Current Science Bangalore*. March 76(5): 631-633. {a} Division of Entomology, Department of Zoology, Bharathiar University, Coimbatore, 641 046, India

Murugan, K., S. Sivaramakrishnan, et al. (1999). Potentiating effects of neem on nucleopolyhedrovirus treatment of *Spodoptera litura* Fab. *Insect Science and its Application*. April Sept 19(2/3): 229-235. {a} Division of Entomology, Department of Zoology, Bharathiar University, Coimbatore, 641 046, India

Musabyimana, T. and R. C. Saxena (1999). Efficacy of neem seed derivatives against nematodes affecting banana. *Phytoparasitica* 27(1): 43-49. {a} Int. Cent. Insect Physiol. Ecol., P.O. Box 30772, Nairobi, Kenya

Nagalakshmi, D., V. R. B. Sastry, et al. (1999). Performance of broiler chicks fed on diets containing urea ammoniated neem (*Azadirachta indica*) kernel cake. *British Poultry Science*. March 40(1): 77-83. {a} Project Directorate on Poultry, S. V. Rama Rao, Rajendranagar, Hyderabad, AP, 500 030, India

Naidu, C. V., S. P. S. Srinivasa, et al. (1999). Performance of some tree species in alkali soil. *Indian Forester*. May 125(5): 508-512. {a} Department of Biotechnology, S.V. University, Tirupati, AP, India

Nanang, D. M. and T. K. Nunifu (1999). Selecting a functional form for anamorphic site index curve estimation. *Forest Ecology and Management* 118(1-3): 211-221. {a} Department of Rural Economy, University of Alberta, Edmonton, T6G 2H1, Canada

Nargas, J. and P. C. Trivedi (1999). Traditional and medicinal importance of *Azadirachta indica* juss. In India. *Journal of Economic and Taxonomic Botany*. Sept. 23(1): 33-37. {a} Department of Botany, University of Rajasthan, Jaipur, RAJ, 302 004, India

Naumann, K. and L. J. Rankin (1999). Pre-attack systemic applications of a neem-based insecticide for control of the mountain pine beetle, *Dendroctonus ponderosae* Hopkins (Coleoptera: Scolytidae). *Journal of the Entomological Society of British Columbia*. Dec. 96: 13-19. {a} Dept. Biology, Langara College, 100 W. 49 Ave., Vancouver, BC, V5Y 2Z6, Canada

Njiro, S. M. and T. M. W. Kofi (1999). Effect of an aqueous extract of *Azadirachta indica* on the immune response in mice. *Onderstepoort Journal of Veterinary Research*. March 66(1): 59-62. {a} Department of Veterinary Pathology and Microbiology, University of Nairobi, Kabete, Kenya

Njiro, S. M. and T. M. W. Kofi (1999). Effect of an aqueous extract of *Azadirachta indica* on the immune response in mice. *Onderstepoort Journal of Veterinary Research*. March 66(1): 59-62. {a} Department of Veterinary Pathology and Microbiology, University of Nairobi, Kabete, Kenya

Oliveira, J. V. and J. D. Vendramim (1999). Repellency of essential oils and powders from plants on adults of *Zabrotes subfasciatus* (Boh.) (Coleoptera: Bruchidae) on bean seeds. *Anais da Sociedade Entomologica do Brasil*. Sept. 28(3): 549-555. {a} Departamento de Agronomia/Fitossanidade, UFRPE, Rua D. Manoel de Medeiros s/n, Dois Irmaos, 52171-900, Recife, PE, Brazil

Pal, D. C. (1999). Some plants in traditional and homoeopathic systems of medicine in India. *Journal of Economic and Taxonomic Botany*. Sept. 23(1): 79-83. {a} Botanical Survey of India, Indian Botanic Garden, Howrah, 711 103, India

Palanisamy, K. (1999). Propagation of Neem (*Azadirachta indica*) by air layering. *Indian Forester*. March 125(3): 331-332. {a} Tropical Forest Research Institute, Jabalpur, Madhya Pradesh, India

Palsson, K. and T. G. T. Jaenson (1999). Plant products used as mosquito repellents in Guinea Bissau, West Africa. *Acta Tropica* 72(1): 39-52. {a} Dep. Zool., Uppsala Univ., Villavagen 9, S-753 26 Uppsala, Sweden

Parvatha, R. P., M. S. Rao, et al. (1999). Eco-friendly management of *Meloidogyne incognita* on tomato by integration of *Verticillium chlamydosporium* with neem and calotropis leaves. *Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz*. Sept. 106(5): 530-533. {a} Division of Agricultural Entomology and Nematology, Indian Institute of Horticultural Research, Bangalore, 560 089, India

Prasad, R., S. Singh, et al. (1999). Coating of prilled urea with neem (*Azadirachta indica* Juss) oil for efficient nitrogen use in rice. *Naturwissenschaften*. Nov. 86(11): 538-539. {a} Indian Agricultural Research Institute, New Delhi, 110012, India

Puri, S. and S. L. Swamy (1999). Geographical variation in rooting ability of stem cuttings of *Azadirachta indica* and *Dalbergia sissoo*. *Genetic Resources and Crop Evolution* 46(1): 29-36. {a} Department of Forestry, Indira Gandhi Agricultural University, Raipur, MP, 492 012, India



- Purohit, A. and H. M. M. Daradka (1999). Hypolipidaemic effects of neem flower (*Azadirachta indica* A. Juss.) in rabbits. *Geobios Jodhpur*. April July 25(2-3): 146-148. {a} Department of Zoology, J.N.V. University, Jodhpur, 342001, India
- Raguraman, S. and R. P. Singh (1999). Biological effects of neem (*Azadirachta indica*) seed oil on an egg parasitoid, *Trichogramma chilonis*. *Journal of Economic Entomology*. Dec. 92(6): 1274-1280. {a} Department of Entomology, Agricultural College and Research Institute, Madurai, TN, 625104, India
- Rivonker, C. U., C. R. Abuvarajan, et al. (1999). Chitin degrading bacteria from the prawn *Metapenaeus dobsoni* M. and their control. *Indian Journal of Marine Sciences*. March 28(1): 77-80. {a} Department of Marine Sciences and Marine Biotechnology, Goa University, Taleigao Plateau, GOA, 403 206, India
- Saha, D., J. G. Gavali, et al. (1999). Studies on epicuticular wax in some trees exposed to industrial air pollution. *Phytomorphology*. July Sept 49(3): 277-281. {a} Ecology Lab, Department of Botany, Faculty of Science, M.S. University, Vadodara, GUJ, 390 002, India
- Sastry, V. R. B., R. C. Katiyar, et al. (1999). Performance of buffalo bull calves fed alkali treated or urea ammoniated neem (*Azadirachta indica*) seed kernel-cake as protein supplement. *Indian Journal of Animal Sciences*. Dec. 69(12): 1074-1076. {a} Indian Veterinary Research Institute, Izatnagar, Uttar Pradesh, 243 122, India
- Sateesh, M. K. and S. S. Bhat (1999). Detection of seed-borne *Phomopsis azadirachtae* and its transmission in *Azadirachta indica* (Neem). *Seed Science and Technology* 27(2): 753-759. {a} Department of Studies in Botany, Mysore University, Manasagangotri, Mysore, 570 006, India
- Scott, R. H., B. K. O, et al. (1999). Extracellular and intracellular actions of azadirachtin on the electrophysiological properties of cultured rat DRG neurones. *Comparative Biochemistry and Physiology C Pharmacology Toxicology and Endocrinology*. May 123(1): 85-93. {a} Department of Biomedical Sciences, Institute of Medical Sciences, Aberdeen University, Foresterhill, Aberdeen, AB25 2ZD, UK
- Sharma, B. K. and A. K. Basandrai (1999). Efficacy of some plant extracts for the management of Karnal bunt (*Neovossia* (*Tilletia*) *indica*) of wheat (*Triticum aestivum*). *Indian Journal of Agricultural Sciences*. Dec. 69(12): 837-839. {a} Regional Research Station, Himachal Pradesh Krishi Vishvavidyalay, Dhaula Kuan, Sirmour, HP, 173 001, India
- Sindhan, G. S., I. Hooda, et al. (1999). Evaluation of plant extracts for the control of powdery mildew of pea. *Journal of Mycology and Plant Pathology*. Aug. 29(2): 257-258. {a} Department of Plant Pathology, CCS Haryana Agricultural University, Hisar, HR, 125 004, India
- Sindhan, G. S., I. Hooda, et al. (1999). Effect of some plant extracts on the vegetative growth of root rot causing fungi. *Journal of Mycology and Plant Pathology*. April 29(1): 110-111. {a} Department of Plant Pathology, CCS Haryana Agricultural University, Hisar, Haryana, 125 004, India
- Singh, A., M. S. Negi, et al. (1999). Assessment of genetic diversity in *Azadirachta indica* using AFLP markers. *Theoretical and Applied Genetics*. July 99(1-2): 272-279. {a} Plant Molecular Biology Division, Tata Energy Research Institute, Darbari Seth Block, Habitat Place, Lodhi Road, New Delhi, 110 003, India
- Singh, K. P., P. K. Singh, et al. (1999). Litterfall, litter decomposition and nutrient release patterns in four native tree species raised on coal mine spoil at Singrauli, India. *Biology and Fertility of Soils*. Aug. 29(4): 371-378. {a} Centre of Advanced Study in Botany, Banaras Hindu University, Varanasi, 221005, India
- Su, T. and M. S. Mulla (1999). Oviposition bioassay responses of *Culex tarsalis* and *Culex quinquefasciatus* to neem products containing azadirachtin. *Entomologia Experimentalis et Applicata*. May 91(2): 337-345. {a} Department of Entomology, University of California, Riverside, CA, 92521-0314, USA
- Sundararaju, D. and B. P. C. Sundara (1999). Survey and tritrophic interactions between host plants, *Helopeltis antonii* Signoret (Heteroptera: Miridae) and its egg parasitoids. *Journal of Biological Control*. [print] 13(1-2): 19-23. {a} National Research Centre for Cashew, Puttur, Karnataka, 574 202, India
- Thebtaranonth, Y. (1999). Scientific aspects of traditional usage of bioresources. *Journal of Natural Toxins*. June 8(2): 279-284. {a} Department of Chemistry, Faculty of Science, Mahidol University, Bangkok, Thailand
- Tripathi, A., D. S. Tripathi, et al. (1999). Phytomonitoring and NOx pollution around silver refineries. *Environment International*. May 25(4): 403-410. {a} D 61/24 E-1 K, Sidhgiri Bagh, Varanasi, 221010, India
- Trisyono, A. and M. E. Whalon (1999). Toxicity of neem applied alone and in combinations with *Bacillus thuringiensis* to Colorado potato beetle (Coleoptera: Chrysomelidae). *Journal of Economic Entomology*. Dec. 92(6): 1281-1288. {a} Department of Entomology and Center for Integration Plant Systems, Michigan State University, East Lansing, MI, USA
- Umeh, V. C. and M. F. Ivbijaro (1999). Effects of termite damage to maize of seed extracts of *Azadirachta indica* and *Piper guineense* in farmers' fields. *Journal of Agricultural Science*. Dec. 133(4): 403-407. {a} International Crops Research Institute for the Semi-Arid Tropics, Bamako, Mali

- Uniyal, K. (1999). Collar rot in *Azadirachta indica* and its control. *Indian Forester*. May 125(5): 513-516. {a} Forest Pathology Division, Forest Research Institute, Dehra Dun, India
- Upadhyay, S. and R. C. Mishra (1999). Efficacy and economics of insecticides and neem (*Azadirachta indica*)-based products on incidence of aphid (*Aphis gossypii*) on isabgol (*Plantago ovata*). *Indian Journal of Agricultural Sciences*. Feb. 69(2): 161-162. {a} College of Agriculture, Jawaharlal Nehru Krishi Vishwa Vidyalaya, Mandasaur, MP, 458 001, India
- Vasanthakumar, P., K. Sharma, et al. (1999). Effect of graded dietary levels of neem (*Azadirachta indica*) seed kernel cake on carcass characteristics of broiler rabbits. *Asian Australasian Journal of Animal Sciences*. Dec. 12(8): 1246-1250. {a} Division of Animal Nutrition, Indian Veterinary Research Institute, Izatnagar, 243 122, India
- Venkadasubramanian, V. and P. M. M. David (1999). Insecticidal toxicity of commercial *Bacillus thuringiensis* (Berliner) products in combination with botanicals to *Spodoptera litura* (Fabricius) and *Helicoverpa armigera* (Hubner). *Journal of Biological Control*. [print] 13(1-2): 85-92. {a} Department of Agricultural Entomology, Agricultural College and Research Institute, Killikulam, Vallanad, Tamil Nadu, 628 252, India
- Yousef, S. A. and F. A. Fattah (1999). Propagation of neem plant (*Azadirachta indica* L.) by tissue culture (research note). *Dirasat Agricultural Sciences*. May 26(2): 287-291. {a} Center for Genetic Engineering and Biotechnology, Baghdad, Iraq
- Akhila, A. and M. Srivastav (1998). Simplified extraction and estimation of 'Neem Bitters' from Neem (*Azadirachta indica*) seed kernels. *Indian Forester*. Dec. 124(12): 1020-1024. {a} Central Institute of Medicinal and Aromatic Plants, Lucknow, UP, India
- Benoit, V. F., A. Valentin, et al. (1998). In vitro antiplasmodial activity of stem and root extracts of *Nauclea latifolia* S.M. (Rubiaceae). *Journal of Ethnopharmacology* 61(3): 173-178. {a} Lab. Immunol. et Parasitol., Fac. Pharmacie, 15 Av. Charles Flahault, Montpellier 34060 Cedex 2, France
- Bhat, S. S., M. K. Sateesh, et al. (1998). A new destructive disease of neem (*Azadirachta indica*) incited by *Phomopsis azadirachtae*. *Current Science Bangalore* 74(1): 17-19. Dep. Studies Botany, Univ. Mysore, Manasagangotri, Mysore 570 006, India
- Breuer, M. and L. A. De (1998). Meliaceous plant preparations as potential insecticides for control of the oak processionary, *Thaumetopoea processionea* (L.) (Lepidoptera: Thaumetopoeidae). *Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent* 63(2b): 529-536. Zool. Inst., Lab. Dev. Physiol. Mol. Biol., K.U. Leuven, Naamsestr. 59, B-3000 Leuven, Belgium
- Butool, F., A. Haseeb, et al. (1998). Management of root-knot nematode, *Meloidogyne incognita*, infesting Egyptian henbane, *Hyoscyamus muticus* L., by the use of nematicides and oilcakes. *International Journal of Pest Management* 44(4): 199-202. Central Inst. Med. Aromatic Plants Plants, Lucknow-226 015, India
- Cardet, C., T. Kandji, et al. (1998). Efficiency of neem and groundnut oils in protecting leguminous tree seeds against seed beetles in the Sahel. *Agroforestry Systems* 40(1): 29-40. {a} B.P. 1716, Dakar, Senegal
- Chakraborty, P., B. S. Gupta, et al. (1998). Airborne allergenic pollen grains on a farm in West Bengal, India. *Grana* 37(1): 53-57. {a} Div. Palynol. Environ. Biol., Dep. Botany, Bose Inst., 93/1 Acharya P. C. Rd., Calcutta-700 009, India
- Chattopadhyay, R. R. (1998). Possible biochemical mode of anti-inflammatory action of *Azadirachta indica* A. Juss. in rats. *Indian Journal of Experimental Biology* 36(4): 418-420. {a} Biometry Res. Unit, Indiana Stat. Inst., 203, Barrackpore Trunk Rd., Calcutta 700 035, India
- Dakshinkar, N. P., A. M. Rode, et al. (1998). Therapeutic evaluation of crude extracts of indigenous plants against mange of dogs. *Indian Veterinary Medical Journal* 22(4): 321-322. {a} Department of Medicine, Nagpur Veterinary college, Nagpur, 440006, India
- Deka, M. K., R. Handique, et al. (1998). Effect of aqueous plant extracts on longevity and fecundity of tea mosquito bug. *Crop Research Hisar* 16(1): 102-105. Plant Protection Dep., TRA, Tocklai Exp. Stn., Jorhat-785 008, India
- Deka, M. K., K. Singh, et al. (1998). Bioefficacy of aqueous plant extracts on viability of eggs and subsequent development of tea mosquito bug. *Crop Research Hisar* 16(2): 260-264. {a} Dibrugarh Univ., TRA Tocklai Exp. Stn., Jorhat-785 008, India
- Dhar, R., K. Zhang, et al. (1998). Inhibition of the growth and development of asexual and sexual stages of drug-sensitive and resistant strains of the human malaria parasite *Plasmodium falciparum* by Neem (*Azadirachta indica*) fractions. *Journal of Ethnopharmacology* 61(1): 31-39. {a} Dep. Molecular Microbiol. and Immunol., Sch. Hygiene and Public Health, Johns Hopkins Univ., 615 N. Wolfe St., Baltimore, MD 21205, USA
- Dimetry, N. Z., G. S. El, et al. (1998). The effect of lipoidal matter of neem fruits and leaves on *Spodoptera littoralis* development and reproduction. *Insect Science and its Application*. Oct. Dec. 18(4): 325-331. {a} Department of Pests and Plant Protection, National Research Centre (NRC), Dokki, Cairo, Egypt
- Dubey, S. C. (1998). Evaluation of different fungal antagonists, plant extracts and oil cakes against *Thanatephorus cucumeris*

- causing banded blight of rie. *Journal of Mycology and Plant Pathology*. Dec. 28(3): 266-269. {a} Dep. Plant Pathol., Birsa Agric. Univ., Ranchi 834 006, Bihar, India
- Dunkel, F. V. and D. C. Richards (1998). Effect of an azadirachtin formulation on six nontarget aquatic macroinvertebrates. *Environmental Entomology* 27(3): 667-674. {a} Dep. Entomol., Montana State Univ., Bozeman, MT 59717, USA
- Eeswara, J. P., E. J. Allan, et al. (1998). The influence of stage of seed maturity, moisture content and storage temperature on the survival of neem (*Azadirachta indica*) seed in storage. *Seed Science and Technology* 26(2): 299-308. {a} Dep. Agric., Univ. Aberdeen, Aberdeen AB24 5UA, UK
- Eeswara, J. P., T. Stuchbury, et al. (1998). A standard procedure for the micropropagation of the neem tree (*Azadirachta indica* A. Juss). *Plant Cell Reports* 17(3): 215-219. {a} Dep. Agric., Univ. Aberdeen, 581 King St., Aberdeen AB24 5UA, UK
- Enikuomehin, O. A., T. Ikotun, et al. (1998). Evaluation of ash from some tropical plants of Nigeria for the control of *Sclerotium rolfsii* sacc. on wheat (*Triticum aestivum* L.). *Mycopathologia* 142(2): 81-87. {a} Department of Plant Breeding and Seed Technology, University of Agriculture, Abeokuta, Ogun State, Nigeria
- Fabry, W., P. O. Okemo, et al. (1998). Antibacterial activity of East African medicinal plants. *Journal of Ethnopharmacology* 60(1): 79-84. {a} Inst. Med. Mikrobiol., Universitaetsklin. Essen, Hufelandstr. 55, 45122 Essen, Germany
- Farooqui, N., S. A. Ranade, et al. (1998). RAPD profile variation amongst provenances of neem. *Biochemistry and Molecular Biology International* 45(5): 931-939. {a} Cent. Plant Mol. Biol., Natl. Bot. Res. Inst., Rana Pratap Marg, Lucknow 226 001, U.P., India
- Gahlaut, K. S. (1998). Observation on the treatment of pediculosis and other ectoparasitic dermatoses in buffalo calves. *Indian Veterinary Medical Journal* 22(3): 243-244. {a} Vet. Hosp., Satbari, Mehrauli, New Delhi 110 073, India
- Ganaba, S., J. M. Ouadba, et al. (1998). Fuelwood in the Sahelian region of Burkina Faso: Ethnic preferences. *Secheresse* Montrouge 9(4): 261-268. {a} Departement Productions forestieres, INERA, CRREA du Sahel, Dori, Burkina-Faso
- Garg, S., G. P. Talwar, et al. (1998). Immunocontraceptive activity guided fractionation and characterization of active constituents of neem (*Azadirachta indica*) seed extracts. *Journal of Ethnopharmacology* 60(3): 235-246. {a} Rush Presbyterian St. Luke's Med. Cent., Sect. Ob/Gyn Research, 830 JS, 1653 W. Congress Parkway, Chicago, IL 60612, USA
- Gera, M., N. Gera, et al. (1998). Variation in rooting response in ten provenances of *Azadirachta indica* A. Juss. *Indian Forester* 124(9): 696-701. Silviculture Div., Tropical Forest Res. Inst., Jabalpur, India
- Govindachari, T. R., G. Suresh, et al. (1998). Identification of antifungal compounds from the seed oil of *Azadirachta indica*. *Phytoparasitica* 26(2): 109-116. {a} Cent. Agrochem. Res., SPIC Sci. Found., Madras 600 032, India
- Gowda, S. K., S. V. S. Verma, et al. (1998). Neem (*Azadirachta indica*) kernal meal in the diet of White Leghorn layers. *British Poultry Science* 39(5): 648-652. {a} Anim. Nutr. Div., Natl. Inst. Anim. Nutr. Physiol., Adugodi, Bangalore 560030, India
- Hong, T. D. and R. H. Ellis (1998). Contrasting seed storage behaviour among different species of Meliaceae. *Seed Science and Technology* 26(1): 77-95. {a} Dep. Agric., Univ. Reading, Earley Gate, PO Box 236, Reading RG6 6AT, UK
- Iqbal, M. Z. and M. Shafiq (1998). Toxicity of cement dust on the growth of some tree seedlings. *Ekologia Bratislava* 17(4): 434-439. {a} Department of Botany, University of Karachi, Karachi, 75270, Pakistan
- Jarvis, A. P., S. Johnson, et al. (1998). Stability of the natural insecticide azadirachtin in aqueous and organic solvents. *Pesticide Science* 53(3): 217-222. {a} Dep. Chem., Keele Univ., Staffordshire ST5 5BG, UK
- Joshi, S. P., S. R. Rojatkhar, et al. (1998). Antimalarial activity of neem (*Azadirachta indica*). *Journal of Medicinal and Aromatic Plant Sciences* 20(4): 1000-1002. {a} National Chemical Laboratory, Pune, MAH, 411 008, India
- Karnavar, G. K. and M. P. Dlamini (1998). Pesticidal and other properties of neem, *Azadirachta indica* and related species - An overview. *Journal of Animal Morphology and Physiology*. June Dec 45(1-2): 1-14. {a} Department of Biological Sciences, University of Swaziland, Kwaluseni, Swaziland
- Kaura, S. K., S. K. Gupta, et al. (1998). Morphological and oil content variation in seeds of *Azadirachta indica* A. Juss. (Neem) from northern and western provenances of India. *Plant Foods for Human Nutrition Dordrecht* 52(4): 293-298. {a} Oil Seeds Section, Department of Plant Breeding, CCS Haryana Agricultural University, Hisar, 125 004, India
- Kulat, S. S., S. A. Nimbalkar, et al. (1998). Relative efficacy of indigenous plant extracts against *Dactynotus carthami* (HRL) on safflower. *PKV Research Journal*. July 22(2): 216-218. {a} Department of Entomology, College of Agriculture, Nagpur, India
- Kumar, S., K. K. Srivastava, et al. (1998). New record of fungal infection: *Fusarium* sp. in the culture of land slug *Laevicaulis alte* (Ferussac): A severe pest of *Azadirachta indica* (neem) seedlings of Rajasthan and Gujarat. *Indian Forester* 124(5): 351-353. Div. Forest Protection, Arid Forest Res. Inst., Jodhpur, India

- Kusumran, W. R., A. Ratanavila, et al. (1998). Effects of neem flowers, Thai and Chinese bitter gourd fruits and sweet basil leaves on hepatic monooxygenases and glutathione S-transferase activities, and in vitro metabolic activation of chemical carcinogens in rats. *Food and Chemical Toxicology* 36(6): 475-484. {a} Biochem. Chem. Carcinogenesis Sect., Res. Div., Natl. Cancer Inst., Bangkok, Thailand
- Lal, S. (1998). Rehabilitation of Ganga Khadar and Khola areas of western zone of U.P. by utilizing tall planting technique. *Indian Forester* 124(2): 99-115. {a} Western Zone, Bareilly, UP, India
- Lale, N. E. S. (1998). Neem in the conventional Lake Chad Basin area and the threat of Oriental yellow scale insect (*Aonidiella orientalis* Newstead) (Homoptera: Diaspididae). *Journal of Arid Environments* 40(2): 191-197. {a} Dep. Crop Sci., Fac. Agric., Univ. Maiduguri, P.M.B. 1069, Maiduguri, Nigeria
- Lans, C. and G. Brown (1998). Ethnoveterinary medicines used for ruminants in Trinidad and Tobago. *Preventive Veterinary Medicine* 35(3): 149-163. {a} 17 Cadiz Road, Belmont, Port of Spain, Trinidad and Tobago
- Lei, G., X. Zhu, et al. (1998). Callus formation in explants of *Azadirachta indica* and the azadirachtin content. *Journal of Tropical and Subtropical Botany* 6(3): 267-270. South China Inst. Botany, Acad. Sinica, Guangzhou 510650, China
- Leprince, O., A. A. C. Van, et al. (1998). Oleosins prevent oil-body coalescence during seed imbibition as suggested by a low-temperature scanning electron microscope study of desiccation-tolerant and -sensitive oilseeds. *Planta Heidelberg* 204(1): 109-119. {a} Dep. Brassica Oilseeds Res., John Innes Centre, Colney, Norwich NR4 7UH, UK
- Mansingh, A. and L. A. D. Williams (1998). Pesticidal potential of tropical plants: II. Acaricidal activity of crude extracts of several Jamaican plants. *Insect Science and its Application*. April June 18(2): 149-155. {a} Pesticide and Pest Research Group, Department of Life Sciences, University of the West Indies, Mona, Kingston 7, Jamaica
- Mathew, A. S., K. N. Patel, et al. (1998). Investigation on antifeedant and anthelmintic potential of *Adhatoda vasica* Nees. *Indian Journal of Natural Products*. June 14(1): 11-16. {a} Department of Pharmacognosy, L. M. College of Pharmacy, Ahmedabad, 380 001, India
- Mehrotra, V. S. (1998). Arbuscular mycorrhizal associations of plants colonizing coal mine spoil in India. *Journal of Agricultural Science* 130(2): 125-133. {a} PSS Central Inst. Vocational Educ., 131, Zone-II, M.P. Nagar, Bhopal-462 011, India
- Mishra, D. K., D. Kumar, et al. (1998). Effect of substratum, storage temperature and orientation on percentage seed germination of *Azadirachta indica* A. Juss. (neem). *Seed Research New Delhi* 26(1): 39-42. Seed Testing Lab., Silviculture Div., Arid Forest Res. Inst., Jodhpur, Rajasthan-342 005, India
- Mujumdar, A. M., A. S. Upadhye, et al. (1998). Effect of *Azadirachta indica* leaf extract on carbontetrachloride-induced hepatic damage in albino rats. *Indian Journal of Pharmaceutical Sciences* 60(6): 363-367. {a} Agharkar Res. Inst., Agarkar Rd., Pune 411 004, India
- Murthy, B. N. S. and P. K. Saxena (1998). Somatic embryogenesis and plant regeneration neem (*Azadirachta indica* A. Juss.). *Plant Cell Reports* 17(6-7): 469-475. {a} Dep. Horticultural Sci., Univ. Guelph, Guelph, Ontario N1G 2W1, Canada
- Murugan, K., D. Jeyabalan, et al. (1998). Antifeedant and growth-inhibitory properties of neem limonoids against the cotton bollworm, *Helicoverpa armigera* (Hubner). *Insect Science and its Application*. April June 18(2): 157-162. {a} Division of Entomology, Department of Zoology, Bharathiar University, Coimbatore, 641 046, India
- Murugesan, S., A. Khan, et al. (1998). New host record and host selection behaviour of some entomophagous insects of forestry tree species of arid and semi-arid region. *Indian Forester* 124(2): 163-166. {a} Div. Forest Prot., Inst. Forest Genet. and Tree Breeding, Coimbatore, Tamil Nadu, India
- Nagalakshni, D., V. R. B. Sastry, et al. (1998). Relative efficacy of alkali treatment and urea ammoniation of neem (*Azadirachta indica*) seed kernel-cake on the performance of broiler chicks. *Indian Journal of Animal Sciences* 68(9): 961-964. {a} Venkateswara House, 3-5-808/1, Hyderguda, Hyderabad 500 029, India
- Nanang, D. M. (1998). Suitability of the Normal, Log-normal and Weibull distributions for fitting diameter distributions of neem plantations in Northern Ghana. *Forest Ecology and Management* 103(1): 1-7. {a} Dep. Rural Ecol., Univ. Alberta, Edmonton, AB T6G 2H1, Canada
- Neeraja, B. and G. Narayana (1998). Use of Neemol for cestode infected white leg horns to increase egg production. *Geobios Jodhpur* 25(2-3): 149-151. Dep. Zool., Osmania Univ., Hyderabad-500 007, India
- Palanisamy, K., S. A. Ansari, et al. (1998). Adventitious rooting in shoot cuttings of *Azadirachta indica* and *Pongamia pinnata*. *New Forests* 16(1): 81-88. Trop. For. Res. Inst., Mandla Road, Jabalpur-482 021, India
- Pandey, K. P. and S. Singh (1998). Evaluation of natural plant product as an insecticide against top borer *Scirpophaga excerptalis* Wlk. in sugarcane. *Entomon* 23(3): 235-237. {a} G. S. Sugarcane Breeding and Res. Inst. Seorahi, P.O. Tamkuhi Raj 274 407, Dist-Padrauna, India

- Pats, P. and M. B. Isman (1998). Effect of neem on adult longevity, oviposition and larval development of the cabbage fly, *Delia radicum* (L.) (Dipt., Anthomyiidae). *Journal of Applied Entomology* 122(2-3): 125-127. {a} NORFA, Nedre Vollgate 8, N-0158 Oslo, Norway
- Prithiviraj, B., U. P. Singh, et al. (1998). Field evaluation of ajoene, a constituent of garlic (*Allium sativum*) and neemazal, a product of neem (*Azadirachta indica*) for the control of powdery mildew (*Erysiphe pisi*) of pea (*Pisum sativum*). *Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz* 105(3): 274-278. {a} Dep. Mycol. Plant Pathol., Inst. Agric. Sci., Banaras Hindu Univ., Varanasi-221005, India
- Qiu, Y. T., L. J. J. A. Van, et al. (1998). Chemoreception of oviposition inhibiting terpenoids in the diamondback moth *Plutella xylostella*. *Entomologia Experimentalis et Applicata* 87(2): 143-155. {a} Lab. Entomology, Wageninge Agricultural Univ., P.O. Box 8031, 6700 EH Wageningen, Netherlands
- Raguraman, S. and R. P. Singh (1998). Behavioral and physiological effects of neem (*Azadirachta indica*) seed kernel extracts on larval parasitoid, *Bracon hebetor*. *Journal of Chemical Ecology* 24(7): 1241-1250. {a} Agric. Res. Stn., Tamil Nadu Agric. Univ., Paramakudi 623707, Tamil Nadu, India
- Rajapakse, R., S. G. J. N. Senanayake, et al. (1998). Effect of five botanicals on oviposition, adult emergence and mortality of *Callosobruchus maculatus* Fabr. (Coleoptera: Bruchidae) infesting cowpea, *Vigna unguiculata* L. Walp. *Journal of Entomological Research New Delhi* 22(2): 117-122. Dep. Agric. Biol., Fac. Agric., Univ. Ruhuna, Mapalana, Kamburupitiya, Sri Lanka
- Rajput, K. S. and K. S. Rao (1998). Occurrence of intercellular spaces in cambial rays. *Israel Journal of Plant Sciences* 46(4): 299-302. {a} Dep. Biosci., Sardar Patel Univ., Vallabh Vidyanagar 388 120, Gujarat, India
- Ramji, N., Krishnamachari, et al. (1998). 11-EPI-azadirachtin D: An epimeric azadirachtin analogue from *Azadirachta indica*. *Phytochemistry Oxford* 49(1): 265-267. {a} Dep. Organic Chem., Indian Inst. Sci., Bangalore-560012, India
- Rao, A. V. and J. C. Tarafdar (1998). Selection of plant species for rehabilitation of gypsum mine spoil in arid zone. *Journal of Arid Environments* 39(4): 559-567. Cent. Arid Zone Res. Inst., Jodhpur 342 003, Rajasthan, India
- Reddy, A. V. and R. P. Singh (1998). Fumigant toxicity of neem (*Azadirachta indica* A. Juss.) seed oil volatiles against pulse beetle, *Callosobruchus maculatus* Fab. (Col., Bruchidae). *Journal of Applied Entomology* 122(9-10): 607-611. {a} Div. Entomol., Indian Agric. Res. Inst., New Delhi-110012, India
- Reed, E. and S. K. Majumdar (1998). Differential cytotoxic effects of azadirachtin on *Spodoptera frugiperda* and mouse cultured cells. *Entomologia Experimentalis et Applicata* 89(3): 215-221. {a} Biology Department, Lafayette College Easton, Easton, PA, 18042, USA
- Sacande, M., F. A. Hoekstra, et al. (1998). A multifactorial study of conditions influencing longevity of neem (*Azadirachta indica*) seeds. *Seed Science Research*. Dec. 8(4): 473-482. {a} Centre National de Semences Forestieres (CNSF), Ouagadougou, Burkina-Faso
- Sadekar, R. D., A. Y. Kolte, et al. (1998). Immunopotentiating effects of *Azadirachta indica* (Neem) dry leaves powder in broilers, naturally infected with IBD virus. *Indian Journal of Experimental Biology* 36(11): 1151-1153. Dep. Pharmacol. Med., Dr Panjabrao Deshmukh Krishi Vidyapeeth, Akola 444 104, India
- Saha, A. K. and R. M. Shahjahan (1998). Effects of neem and radiation on the larvae of hide beetle, *Dermestes maculatus* Degeer (Coleoptera: Dermestidae). *Bangladesh Journal of Zoology* 26(1): 7-11. {a} Inst. Food Radiat. Biol., Atomic Energy Res. Establishment, G.P.O. Box No. 3787, Dhaka, Bangladesh
- Sahayaraj, K. (1998). Antifeedant effect of some plant extracts on the Asian armyworm, *Spodoptera litura* (Fabricius). *Current Science Bangalore* 74(6): 523-529. {a} Dep. Bot., St. Joseph's Coll., Trichy 620 002, India
- Samy, R. P. and S. Ignacimuthu (1998). Antibacterial activity of different extracts of *Azadirachta indica* Juss. (Meliaceae). *Uttar Pradesh Journal of Zoology* 18(1): 71-75. {a} Microbiology Division, Entomology Research Institute, Loyola College, Chennai, 600034, India
- Saymaiya, R. K., K. C. Shukla, et al. (1998). Biodiversity conservation through agroforestry system. *Advances in Plant Sciences* 11(2): 111-115. J.N. Krishi Vishwavidyalaya, Regional Agric. Res. Stn., Sagar 470002, India
- Schmutterer, H. (1998). Some arthropod pests and semi-parasitic plant attacking neem (*Azadirachta indica*) in Kenya. *Anzeiger fuer Schaedlingskunde Pflanzenschutz Umweltschutz* 71(2): 36-38. {a} Inst. Phytopathol. Angewandte Zool., Ludwigstr. 23, 35390 Giessen, Germany
- Scott, I. M. and N. K. Kaushik (1998). The toxicity of Margosan-O, a product of neem seeds, to selected target and nontarget aquatic invertebrates. *Archives of Environmental Contamination and Toxicology* 35(3): 426-431. {a} Aquatic Ecosyst. Prot. Branch, Environ. Can., 867 Lakeshore Rd., Burlington, ON L7R 4A6, Canada
- Sharma, B. K. (1998). Antifungal properties of biocontrol agents and plants extracts against causal fungi of yellows and rhizomes

- rot of ginger. *Journal of Biological Control* 12(1): 77-80. {a} Regional Research Station, Himachal Pradesh Krishi Vishwavidyala, Dhaulakuan, HP, 173 001, India
- Sharma, V., A. Bali, et al. (1998). Two nonterpenoidal benzenoid constituents from leaves of *Azadirachta indica*. *Phytochemistry Oxford* 49(7): 2121-2123. {a} Dep. Pharm. Sci. Drug Res., Punjabi Univ., Patiala 147002, Punjab, India
- Siddiqui, B. S., Ghiasuddin, et al. (1998). Tetracyclic triterpenoids of the fruit coats of *Azadirachta indica*. *Phytochemistry Oxford* 47(8): 1631-1636. {a} H.E.J. Res. Inst Chemistry, Univ. Karachi, Karachi-75270, Pakistan
- Singh, K., A. Singh, et al. (1998). The use of piperonyl butoxide and MGK-264 to improve the efficacy of some plant-derived molluscicides. *Pesticide Science* 54(2): 145-149. {a} Dep. Zoology, Univ. Gorakhpur, Gorakhpur-273009, U.P., India
- Singh, S. and R. P. Singh (1998). Neem (*Azadirachta indica*) seed kernel extracts and azadirachtin as oviposition deterrents against the melon fly (*Bactrocera curcurbitae*) and the Oriental fruit fly (*Bactrocera dorsalis*). *Phytoparasitica* 26(3): 191-197. {a} Hindustan Insecticides Ltd., R and D Centre, Udyog Vihar, Gurgaon 122 016, India
- Smith, D. M. and P. G. Jarvis (1998). Physiological and environmental control of transpiration by trees in windbreaks. *Forest Ecology and Management* 105(1-3): 159-173. {a} Inst. Hydrol., Crowmarsh Gifford, Wallingford, Oxfordshire OX10 8BB, UK
- Smith, D. M., P. G. Jarvis, et al. (1998). Management of windbreaks in the Sahel: The strategic implications of tree water use. *Agroforestry Systems* 40(1): 83-96. {a} Inst. Ecol. and Resource Manage., Univ. Edinburgh, Mayfield Road, Edinburgh EH9 3JU, UK
- Srivastava, K. K., P. K. Gupta, et al. (1998). Effect of Neem seed kernel extracts on spermatophyte fungi of Neem (*Azadirachta indica*) seed. *Indian Forester*. Dec. 124(12): 1047-1051. {a} Arid Forest Research Institute, Jodhpur, RAJ, India
- Srividya, N., B. P. S. Devi, et al. (1998). Azadirachtin and nimbin content in in vitro cultured shoots and roots of *Azadirachta indica* A. Juss. *Indian Journal of Plant Physiology* 3(2): 129-134. {a} Dep. Bot., Sri Sathya Sai Inst. High. Learning, Anantapur, Andhra Pradesh-515 001, India
- Su, T. and M. S. Mulla (1998). Antifeedancy of neem products containing azadirachtin against *Culex tarsalis* and *Culex quinquefasciatus* (Diptera: culicidae). *Journal of Vector Ecology* 23(2): 114-122. Dep. Entomol., Univ. California, Riverside, CA 92521-0314, USA
- Su, T. and M. S. Mulla (1998). Ovicidal activity of neem products (Azadirachtin) against *Culex Tarsalis* and *Culex Quinquifasciatus* (Diptera: Culicidae). *Journal of the American Mosquito Control Association* 14(2): 204-209. Dep. Entomol., Univ. California, Riverside, CA 92521-0314, USA
- van, D. H. J. F. J. M., S. A. Hogenhout, et al. (1998). *Azadirachta indica* metabolites interfere with the host-endosymbiont relationship and inhibit the transmission of potato leafroll virus by *Myzus persicae*. *Entomologia Experimentalis et Applicata* 86(3): 253-260. Dep. Virology, DLO Res. Inst. Plant Protection, P.O. Box 9060, 6700 GW Wageningen, Netherlands
- van, R. E. J. and B. D. Roitberg (1998). Effect of a neem (*Azadirachta indica*): Based insecticide on oviposition deterrence, survival, behavior and reproduction of adult western cherry fruit fly (Diptera: Tephritidae). *Journal of Economic Entomology* 91(1): 123-131. Cent. Pest Management, Simon Fraser Univ., Vancouver, BC V5A 1S6, Canada
- vanranden, E. J. and B. D. Roitberg (1998). The effect of a neem (*Azadirachta indica*) based insecticide on survival and development of juvenile western cherry fruit fly (*Rhagoletis indifferens*) (Diptera: Tephritidae). *Canadian Entomologist* 130(6): 869-876. {a} Dep. Indian Affairs North. Div., Forest Manage., 345-330 Main St., Whitehorse, Yukon Y1A 2B5, Canada
- Veeresham, C., M. R. Kumar, et al. (1998). Production of azadirachtin from callus cultures of *Azadirachta indica*. *Fitoterapia* 69(5): 423-424. {a} Faculty Pharmaceutical Sciences, Kakatiya University, Warangal A.P. 506 009, India
- Venkateswarlu, B., J. C. Katyral, et al. (1998). Micro-propagation of plus neem (*Azadirachta indica* A. Juss) and evaluation of field transferred plants. *Indian Forester* 124(7): 537-543. Central Res. Inst. Dryland Agric., Hyderabad, India
- Verma, D. K., V. J. Tripathi, et al. (1998). Antifungal activity of the seed coat extract of *Azadirachta indica*. *Indian Journal of Pharmaceutical Sciences*. Sept. Oct. 60(5): 305-306. {a} Department of chemistry, Faculty of Science, Banaras Hindu University, Varanasi, India
- Verma, S. V. S., S. K. Gowda, et al. (1998). Response of single comb White Leghorn layers to dietary inclusion of raw or alkali-treated neem (*Azadirachta indica*) kernel meal. *Animal Feed Science and Technology* 76(1-2): 169-175. {a} Central Avian Res. Inst., Izatnagar 243122, India
- Wewetzer, A. (1998). Callus cultures of *Azadirachta indica* and their potential for the production of azadirachtin. *Phytoparasitica* 26(1): 47-52. {a} Dep. Phytomedicine, Humboldt-Univ., 14195 Berlin, Germany
- Williams, J. R., C. Y. S. Peng, et al. (1998). The inhibitory effect of azadirachtin on *Bacillus subtilis*, *Escherichia coli*, and *Paenibacillus* larvae, the causative agent of American foulbrood in the honeybee, *Apis mellifera* L. *Journal of Invertebrate*

Pathology 72(3): 252-257. {a} Dep. Pharmacol. Toxicol., Sch. Med., Univ. Calif., Davis, CA 95616, USA

Yadav, V. S., J. P. Singh, et al. (1998). Effect of environmental factors on N mineralization from leaves of tree species in soils. *Crop Research Hisar* 15(2-3): 180-183. Dep. Soil Sci., CCS Haryana Agric. Univ., Hisar-125 004, India

Aerts, R. J. and A. J. Mordue (1997). Feeding deterrence and toxicity of neem triterpenoids. *Journal of Chemical Ecology* 23(9): 2117-2132. {a} Max Planck Inst. Chem. Ecol., Sophienstr. 10, D-07743 Jena, Germany

Akhtar, M. and I. Mahmood (1997). Control of root-knot nematode *Meloidogyne incognita* in tomato plants by seed coating with sunneem and neem oil. *Journal of Pesticide Science* 22(1): 37-38. {a} Plant Protection Div., Inst. Agric., Aligarh Muslim University, Aligarh-202 002, India

Babu, P. B. S., M. S. Nair, et al. (1997). Antifeedant and insecticidal effects of some plant extracts against castor semilooper, *Achaea janata* Linn. *Journal of Insect Science*. [print] September 10(2): 179-180. {a} Regional Research Laboratory (CSIR), Trivandrum, 695 019, India

Babu, R., K. Murugan, et al. (1997). Impact of azadirachtin on quantitative protein and lipid profiles during gonadotropic period of *Atractomorpha crenulata* Fab. (Orthoptera: Acrididae). *Indian Journal of Experimental Biology* 35(9): 998-1001. {a} Div. Entomol., Dep. Zool., Bharathiar Univ., Coimbatore 641 046, India

Bahuguna, V. K. (1997). Silviculture and management practices for cultivation of *Azadirachta indica* (Neem). *Indian Forester* 123(5): 379-386. ICFRE, New Forest, Dehra Dun, U.P., India

Bankole, S. A. (1997). Effect of essential oils from two Nigerian medicinal plants (*Azadirachta indica* and *Morinda lucida*) on growth and aflatoxin B-1 production in maize grain by a toxigenic *Aspergillus flavus*. *Letters in Applied Microbiology* 24(3): 190-192. Dep. Biol. Sci., Ogun State Univ., PMB 2002, Ago-Iwoye, Nigeria

Bhardwaj, R. L. and D. N. Sharma (1997). Evaluation of neem (*Azadirachta indica* Juss) oil as a potent wound healer. Histomorphological and histochemical study. *Indian Veterinary Medical Journal* 21(3): 187-190. Dep. Anatomy and Histology, Coll. Veterinary Animal Sciences, H.P.K.V., Palampur 176 062, India

Chattopadhyay, R. R. (1997). Effect of *Azadirachta indica* hydroalcoholic leaf extract on the cardiovascular system. *General Pharmacology* 28(3): 449-451. Biometry Res. Unit, Indian Statistical Inst., 203, Barrackpore Trunk Rd., Calcutta 700 035, India

Cook, S. P., R. E. Webb, et al. (1997). Field examination of the influence of azadirachtin of gypsy moth (Lepidoptera: Lymantriidae) nuclear polyhedrosis virus. *Journal of Economic Entomology* 90(5): 1267-1272. Univ. Oklahoma, Oklahoma Biol. Survey, 111 East Chesapeake St., Norman, OK 73019, USA

Dod, V. N., V. V. Gabhane, et al. (1997). Storability of neem (*Azadirachta indica* A. Juss.) seeds as influenced by storage containers. *Crop Research Hisar* 14(2): 289-292. All-India Co-ordinated Res. Project Agroforestry Coll. Agric., Nagpur-440 001, India

Dumas, M., F. Bonte, et al. (1997). I and II phospholipase A2 inhibition by plant substances. *Acta Botanica Gallica* 144(4): 481-484. {a} Parfums DIOR, 185 avenue de Verdun, F-45804 St. Jean de Braye Cedex, France

Eberhardt, H. J. (1997). Alternative forms of storage protection: Biological insecticides for the control of the cigarette beetle (*Lasioderma serricorne*) and the tobacco moth (*Ephestia elutella*). *Beitraege zur Tabakforschung International* 17(2): 31-47. {a} Verband Cigarettenindustrie, Koenigswinterer Strasse 550, D-53227 Bonn, Germany

Gera, M., N. Gera, et al. (1997). Rooting trial of *Azadirachta indica* A. Juss through shoot cuttings. *Indian Forester* 123(9): 860-862. Silviculture Div., Tropical Forest Res. Inst., Jabalpur, Madhya Pradesh, India

Ghosh, T. K. and K. C. Saha (1997). Effects of inoculation of cyanobacteria on nitrogen status and nutrition of rice (*Oryza sativa* L.) in an Entisol amended with chemical and organic sources of nitrogen. *Biology and Fertility of Soils* 24(1): 123-128. {a} Dep. Agric. Chem. Soil Sci., Bidhan Chandra Krishi Viswavidyalaya, Mohanpur-741252, West Bengal, India

Govindachari, T. R. and G. Gopalakrishnan (1997). 13,14-Desepoxyazadirachtin-A, a tetranortriterpenoid from *Azadirachta indica*. *Phytochemistry Oxford* 45(2): 397-399. {a} Centre Agrochemical Res., SPIC Sci. Foundation, 110 Mount Rd., Madras 600 032, India

Gowda, S. K., A. V. Elangovan, et al. (1997). Metabolizable energy of neem (*Azadirachta indica*) kernel meal for poultry. *Indian Journal of Poultry Science* 32(2): 179-181. Div. Nutr. Feed Technol., Cent. Avian Res. Inst., Izatnagar-243122, India

Gowda, S. K., V. R. B. Sastry, et al. (1997). Fermentation pattern and enzymatic activity in caecum of rabbits fed processed neem (*Azadirachta indica*) kernel meal incorporated diets. *Asian Australasian Journal of Animal Sciences* 10(4): 398-401. {a} Natl. Inst. Animal Nutrition Physiol. Adugodi, Bangalore 560030, India

Gupta, P. K. and V. V. Prabhu (1997). On the high performance liquid chromatographic determination and monitoring of azadirachtin in Neem ecotypes. *Indian Forester* 123(11): 1067-1071. {a} ICFRE, Dehra Dun, UP, India

- Hiremath, I. G., Y. J. Ahn, et al. (1997). Insecticidal activity of Indian plant extracts against *Nilaparvata lugens* (Homoptera: Delphacidae). *Applied Entomology and Zoology* 32(1): 159-166. {a} Dep. Agric. Biol., Coll. Agric. Life Sci., Seoul Natl. Univ., Suwon 441-744, South Korea
- Hummel, H. E., D. F. Hein, et al. (1997). Isolation and characterization of the insect development modifier azadirachtin A by various MLCSS methods. *Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent* 62(2a): 213-223. {a} Inst. Phytopathol. and Appl. Zool., Biol. and Biotech. Plant Prot., Justus-Liebig-Univ. Giessen, D-35390 Giessen, Germany
- Isman, M. B. (1997). Neem and other botanical insecticides: Barriers to commercialization. *Phytoparasitica* 25(4): 339-344. Dep. Plant Sci., Univ. B.C., Vancouver, BC V6T 1Z4, Canada
- Jaglan, M. S., K. S. Khokhar, et al. (1997). Evaluation of neem (*Azadirachta indica* A. Juss) extracts against American bollworm, *Helicoverpa armigera* (Hubner). *Journal of Agricultural and Food Chemistry* 45(8): 3262-3268. {a} Dep. Entomol., CCS Haryana Agricultural Univ., Hisar 125004, India
- Jarvis, A. P., S. Johnson, et al. (1997). Photooxidation of nimbin and salannin, tetranortriterpenoids from the neem tree (*Azadirachta indica*). *Journal of Chemical Ecology* 23(12): 2841-2860. {a} Dep. Chem., Keele Univ. Keele, Staffordshire ST5 5BG, UK
- Jeyabalan, D. and K. Murugan (1997). Effect of neem limonoids on feeding and reproduction of *Helicoverpa armigera* (Hubner) (Lepidoptera: Noctuidae). *Entomon* 22(1): 15-20. {a} Div. Entomology, Dep. Zoology, Bharathiar Univ., Coimbatore 641 046, India
- Johnson, S. and E. D. Morgan (1997). Supercritical fluid extraction of oil and triterpenoids from Neem seeds. *Phytochemical Analysis* 8(5): 228-232. {a} Dep. Chem., Keele Univ., Keele, Staffordshire, ST5 5BG, UK
- Johnson, S. and E. D. Morgan (1997). Comparison of chromatographic systems for triterpenoids from Neem (*Azadirachta indica*) seeds. *Journal of Chromatography A* 761(1-2): 53-63. {a} Dep. Chem., Univ. Keele, Keele, Staffordshire ST5 5BG, UK
- Karthikeyan, K., A. V. Rangarajan, et al. (1997). New records of natural enemies on insect pests of neem tree, *Azadirachta indica* A. Juss. *Journal of Biological Control* 11(1-2): 81-83. Dep. Entomol., Tamil Nadu Agric. Univ., Coimbatore 641 003, Tamil Nadu, India
- Kasutri, M., R. N. Ahmed, et al. (1997). Effects of *Azadirachta indica* leaves on the seminal vesicles and ventral prostate in albino rats. *Indian Journal of Physiology and Pharmacology* 41(3): 234-240. {a} Dep. Zool., Karnatak Univ., Dharwad 580 003, India
- Khilare, V. C. and L. V. Gangawane (1997). Application of medicinal plant extracts in the management of thiophantate methyl resistant *Penicillium digitatum* causing green mold of Mosambi. *Journal of Mycology and Plant Pathology* 27(2): 134-137. Soil Microbiology Pesticides Lab., Dep. Botany, Dr. Babasaheb Ambedkar Marathwada Univ., Aurangabad 431 004, Maharashtra, India
- Koul, O., J. S. Shankar, et al. (1997). Antifeedant activity of neem seed extracts and azadirachtin to cabbage aphid, *Brevicoryne brassicae* (L.). *Indian Journal of Experimental Biology* 35(9): 994-997. {a} Insect Biopesticide Res. Cent., 30-Prakash Nagar, Model Town, Jalandhar 144003, India
- Kulat, S. S., S. A. Nimbalkar, et al. (1997). Relative efficacy of some plant extracts against *Aphis gossypii* Glover and *Amrasca devastans* (Distant) on okra. *PKV Research Journal* 21(2): 146-148. {a} Coll. Agric., Nagpur, India
- Kulkarni, N. and K. C. Joshi (1997). Insecticidal action of some plant extracts against *Albizia defoliator*, *Rhesala imparata* Walker (Lepidoptera: Noctuidae). *Entomon* 22(2): 135-139. {a} Tropical Forest Res. Inst., Jabalpur 482 021, India
- Kulkarni, V. V., R. Parthasarathy, et al. (1997). Palatability of tree leaves mixture and their value as feed supplement in grazing sheep. *Indian Journal of Animal Sciences* 67(4): 353-354. Tamil Nadu Univ. Veterinary Animal Sciences, Kattupakam, Tamil Nadu 603 203, India
- Kundu, S. K. and P. M. A. Tigerstedt (1997). Geographical variation in seed and seedling traits of neem (*Azadirachta indica* A. Juss.) among ten populations studied in growth chamber. *Silvae Genetica* 46(2-3): 129-137. Dep. Plant Biol., Univ. Helsinki, P.O. Box 27, FIN-00014 Helsinki, Finland
- Maki, J., T. M. W. Kofi, et al. (1997). Non-effectiveness of *Azadirachta indica* (Neem Tree) leaf extract against the larvae of *Angiostrongylus cantonensis* and *Trichinella spiralis*. *Tropical Medicine* 39(2): 65-68. {a} Dep. Parasitol., Kitasato Univ. Sch. Med., Sagamihara 228, Japan
- Mansour, F. A., K. R. S. Ascher, et al. (1997). Effects of Neemgard on phytophagous and predacious mites and on spiders. *Phytoparasitica* 25(4): 333-336. {a} Dep. Entomol., ARO, Newe Ya'ar Res. Cent., Ramat Yishay 30095, Israel
- Mathew, T., K. Umamaheswaran, et al. (1997). Evaluation of some fast growing multipurpose tree species for Kerala. *Geobios Jodhpur* 24(1): 31-34. Sugarcane Res. Stn., Thiruvalla-689 102, India



- Mitchell, M. J., S. L. Smith, et al. (1997). Effects of the neem tree compounds azadirachtin, salannin, nimbin, and 6-desacetylnimbin on ecdysone 20-monooxygenase activity. *Archives of Insect Biochemistry and Physiology* 35(1-2): 199-209. {a} Dep. Biol. Health Serv., Edinboro Univ. Pa., Edinboro, PA 16444, USA
- Mohan, J., P. K. Tyagi, et al. (1997). Antifertility effect of neem (*Azadirachta indica*) seed kernel meal in chickens. *Asian Australasian Journal of Animal Sciences* 10(6): 609-613. {a} Div. Physiol. and Reprod., Cent. Avian Res. Inst., Izatnagar-243 122, UP, India
- Mondal, D. P., A. K. Garg, et al. (1997). Intake and digestibility on nutrients in crossbred calves fed water washed and untreated neem (*Azadirachta indica*) seed kernel cake. *Indian Journal of Animal Nutrition* 14(2): 94-97. Animal Nutrition Div., Indian Veterinary Res. Inst., Izatnagar 243 122, India
- Mourier, M. (1997). Effects of neem (*Azadirachta indica*) kernel water extracts on cassava mealybug, *Phenacoccus manihoti* (Hom., Pseudococcidae). *Journal of Applied Entomology* 121(4): 231-236. Gudrunsvvej 18, DK-2920 Charlottenlund, Denmark
- Nadagouda, V. B., C. V. Patil, et al. (1997). Growth and yield of seven tree species under high density planting and irrigation. *Indian Forester* 123(1): 61-65. Coll. Agric., Univ. Agric. Sci., Darwad, Raichur, Karnataka, India
- Nair, M. S., S. Gopal, et al. (1997). Optimised isolation procedure for biologically active compounds nimbolide and 28-deoxonimbolide from *Azadirachta indica* leaves. *Phytochemistry Oxford* 46(7): 1177-1178. {a} Regional Res. Lab., Trivandrum-695 019, India
- Nisbet, A. J., A. J. Mordue, et al. (1997). Characterization of azadirachtin binding to Sf9 nuclei in vitro. *Archives of Insect Biochemistry and Physiology* 34(4): 461-473. {a} Dep. Zool., Univ. Aberdeen, Tillydrone Ave., Aberdeen AB24 2TZ, UK
- Oguge, N., u. D. Ndung, et al. (1997). Effects of neem plant (*Azadirachta indica* Juss, Meliaceae) products on maize grain consumption by three common rodent pests in Kenya. *Belgian Journal of Zoology* 127(Suppl.): 129-135. {a} Dep. Zool., Kenyatta Univ., P.O. Box 43844, Nairobi, Kenya
- Omoriege, E. and M. A. Okpanachi (1997). Acute toxicity of water extracts of bark of the Neem plant, *Azadirachta indica* (Lodd) to the cichlid, *Tilapia zilli* (Gervais). *Acta Hydrobiologica*. [print] 39(1-2): 47-51. {a} Department of Zoology, Fisheries Research Unit, University of Jos, Jos, Nigeria
- Palanisamy, K. and P. Kumar (1997). Effect of position, size of cuttings and environmental factors on adventitious rooting in neem (*Azadirachta indica* A. Juss). *Forest Ecology and Management* 98(3): 277-280. {a} Tropical Forest Res. Inst., P.O.-RFRC, Mandla Rd., Jabalpur 482 021 M.P., India
- Partridge, M. J. and J. H. Borden (1997). Evaluation of neem seed extract for control of the spruce aphid, *Elatobium abietinum* (Walker) (Homoptera: Aphididae). *Canadian Entomologist* 129(5): 899-906. {a} Phero Tech Inc., 7572 Probest Way, R.R. 5, Delt, British Columbia, V4G 1E9, Canada
- Patil, M. R. and B. N. Ghoderao (1997). Evaluation of some medicinal and aromatic plants against cotton bacterial blight infection. *PKV Research Journal* 21(2): 179-180. Cotton Res. Unit, Dr. PDKV, Akola, India
- Philip, T. and D. D. Sharma (1997). In vitro evaluation of leaf and oil cake extracts of *Azadirachta indica* and *Pongamia glabra* on mulberry root rot pathogens. *Indian Journal of Sericulture* 36(2): 150-152. {a} Res. Extension Cent., Kidangoor, Angamali 683 572, India
- Ragasa, C. Y., Z. D. Nacpil, et al. (1997). Tetranortriterpenoids from *Azadirachta indica*. *Phytochemistry Oxford* 46(3): 555-558. {a} Chem. Dep., De La Salle Univ., 2401 Taft Avenue, Manila 1004, Philippines
- Raguraman, S. and D. Singh (1997). Biopotentials of *Azadirachta indica* and *Cedrus deodara* oils on *Callosobruchus chinensis*. *International Journal of Pharmacognosy* 35(5): 344-348. {a} Cent. Inst. Med. Aromatic Plants, P.O. CIMAP, Lucknow - 226 015, India
- Rajapakse, R. and S. G. J. N. Senanayake (1997). Effectiveness of seven vegetable oils against *Callosobruchus chinensis* L. in pigeon pea *Cajanus cajan* L. *Entomon* 22(3-4): 179-183. {a} Dep. Agric. Biol., Fac. Agric., Univ. Ruhuna, Mapalana, Kamburupitiya, Sri Lanka
- Rajput, K. S. and K. S. Rao (1997). Occurrence of sieve elements in phloem rays. *IAWA Journal* 18(2): 197-201. Dep. Botany, Fac. Sci., Maharaja Sayajirao Univ. Baroda, Vadodara 390 002, India
- Rao, M. S., R. P. Parvatha, et al. (1997). Management of root-knot nematode, *Meloidogyne incognita* on tomato by integration of *Trichoderma harzianum* with neem cake. *Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz* 104(4): 423-425. {a} Nematol. Lab., Indian Inst. Horticultural Res., Hessaraghatta Lake P.O., Bangalore 560 089, India
- Sacande, M., S. P. C. Groot, et al. (1997). Cell cycle events in developing neem (*Azadirachta indica*) seeds: Are they related to intermediate storage behaviour? *Seed Science Research* 7(2): 161-168. {a} CPRO-DLO, PO Box 16, 6700 AA Wageningen, Netherlands

- Sairam, M., S. K. Sharma, et al. (1997). Immunomodulatory effects of NIM-76, a volatile fraction from neem oil. *Journal of Ethnopharmacology* 55(2): 133-139. {a} Defence Inst. Physiol. Allied Sci., Timarpur, Lucknow Rd., Delhi 110054, India
- Sateesh, M. K., S. S. Bhat, et al. (1997). *Phomopsis azadirachtae* sp. nov. from India. *Mycotaxon* 65: 517-520. Dep. Studies Bot., Univ. Mysore, Manasagangotri, Mysore 570 006, India
- Saxena, R. C. and E. L. Kidiavai (1997). Neem seed extract spray applications as low-cost inputs for management of the flower thrips in the cowpea crop. *Phytoparasitica* 25(2): 99-110. {a} International Centre Insect Physiology Ecology, Nairobi, Kenya
- Schiffers, B. C., A. Dieye, et al. (1997). HPLC analysis of azadirachtin and formulation of Neem seed extracts. *Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent* 62(2a): 225-233. SENCHIM, Route de Rufisque Km. 13, B.P. 3148, Dakar, Senegal
- Schmutterer, H. (1997). Side-effects of neem (*Azadirachta indica*) products on insect pathogens and natural enemies of spider mites and insects. *Journal of Applied Entomology* 121(2): 121-128. Inst. Phytopathologie und Angewandte Zoologie, Ludwigstr. 23, 35390 Giessen, Germany
- Schutz, S., I. Wengatz, et al. (1997). Development of an enzyme-linked immunosorbent assay for azadirachtins. *Journal of Agricultural and Food Chemistry* 45(6): 2363-2368. {a} Dep. Entomol. Environ. Toxicol., Univ. California, Davis, CA 95616, USA
- Shivpuri, A., O. P. Sharma, et al. (1997). Fungitoxic properties of plant extracts against pathogenic fungi. *Journal of Mycology and Plant Pathology* 27(1): 29-31. Dep. Plant Pathol., Agric. Res. Stn., Durgapura, Jaipur 301 018, Rajasthan, India
- Shukla, A., S. C. Pathak, et al. (1997). Effect of some plant odours in the breeding environment on fecundity and hatching of okra shoot and fruit borer, *Earias vittella* Fab. under laboratory conditions. *Crop Research Hisar* 13(1): 157-161. Dep. Entomology, J. N. K. V. V., Jabalpur-482 004, India
- Shukla, A., S. C. Pathak, et al. (1997). Evaluation of some plant extracts as repellents against shoot and fruit borer, *Earias vittella* Fab. in okra crop. *Geobios Jodhpur* 24(1): 35-39. {a} Dep. Entomol., JNKVV, Jabalpur-482 004, India
- Singh, B. G., N. P. Mahadevan, et al. (1997). Effect of moisture content on the viability and storability of *Azadirachta indica* A. Juss (Neem) seeds. *Indian Forester* 123(7): 631-636. Seed Technol. Div., Inst. Forest Genet. and Tree Breeding, Coimbatore, Tamil Nadu, India
- Singh, U. P. and B. Prithiviraj (1997). Neemazal, a product of neem (*Azadirachta indica*), induces resistance in pea (*Pisum sativum*) against *Erysiphe pisi*. *Physiological and Molecular Plant Pathology* 51(3): 181-194. {a} Dep. Mycol. Plant Pathol., Inst. Agric. Sci., Banaras Hindu Univ., Varanasi 221 005, India
- Smith, D. M., P. G. Jarvis, et al. (1997). Sources of water used by trees and millet in Sahelian windbreak systems. *Journal of Hydrology Amsterdam* 198(1-4): 140-153. {a} Inst. Hydrol., Crowmarsh Gifford, Wallingford OX10 8BB, UK
- Smith, D. M., P. G. Jarvis, et al. (1997). Energy budgets of windbreak canopies in the Sahel. *Agricultural and Forest Meteorology* 86(1-2): 33-49. {a} Inst. Hydrol., Crowmarsh Gifford, Wallingford OX10 8BB, UK
- Smith, D. M., P. G. Jarvis, et al. (1997). Aerodynamic conductances of trees in windbreaks. *Agricultural and Forest Meteorology* 86(1-2): 17-31. {a} Inst. Hydrol., Crowmarsh Gifford, Wallingford OX10 8BB, UK
- Srivastava, K. K., P. K. Gupta, et al. (1997). Antifungal activity of plant products on spermatophyte fungi of *Azadirachta indica* (NEEM) seeds. *Indian Forester* 123(2): 157-161. Arid Forest Res. Inst., Jodhpur, India
- Srivastava, M., A. V. N. Paul, et al. (1997). Effect of neem (*Azadirachta indica* A. Juss) seed kernel extracts on the larval parasitoid *Bracon brevicornis* Wesm. (Hym., Braconidae). *Journal of Applied Entomology* 121(1): 51-57. {a} Div. Entomol., Indian Agric. Res. Inst., New Delhi-100012, India
- Su, W. W., W. I. Hwang, et al. (1997). Induction of somatic embryogenesis in *Azadirachta indica*. *Plant Cell Tissue and Organ Culture* 50(2): 91-95. {a} Dep. Biosystems Eng., Univ. Hawaii, Honolulu, HI 96822, USA
- Sundararaj, R. and S. Murugesan (1997). Record of *Thosea bipartita* (Limaconidae: Lepidoptera) on *Azadirachta indica* (neem) from Jodhpur, India. *Indian Forester* 123(3): 261. Division Forest Protection, Arid Forest Res. Inst., Jodhpur, Rajasthan, India
- Suresh, G., N. S. Narasimhan, et al. (1997). Antifungal fractions and compounds from uncrushed green leaves of *Azadirachta indica*. *Phytoparasitica* 25(1): 33-39. Centre Agrochemical Res., SPIC Sci. Foundation, Madras 600 032, India
- Suresh, G., N. S. Narasimhan, et al. (1997). Structure of nimonol from fresh whole green leaves of *Azadirachta indica*. *Phytochemistry Oxford* 45(4): 807-810. {a} Centre Agrochemical Research, SPIC Science Foundation, 110 Mount Road, Madras 600 032, India
- Talwar, G. P., P. Raghuvanshi, et al. (1997). Plant immunomodulators for termination of unwanted pregnancy and for

contraception and reproductive health. *Immunology and Cell Biology* 75(2): 190-192. {a} Reproductive Health Vaccinology Div., Int. Centre Genetic Engineering Biotechnology, Aruna Asaf Ali Marg, New Delhi 110067, India

Talwar, G. P., S. Shah, et al. (1997). Induced termination of pregnancy by purified extracts of *Azadirachta Indica* (Neem): Mechanisms involved. *American Journal of Reproductive Immunology* 37(6): 485-491. {a} Int. Centre Genetic Eng. and Biotechnol., Aruna Asaf Ali Marg, New Delhi 110 067, India

Tandale, T. H., U. S. Manjul, et al. (1997). Efficacy of neem insecticides against sugarcane white flies. *Journal of Maharashtra Agricultural Universities* 22(3): 308-310. {a} Vasantdada Sugar Inst., Pune 412 307, India

Tilander, Y. and M. Bonzi (1997). Water and nutrient conservation through the use of agroforestry mulches, and sorghum yield response. *Plant and Soil* 197(2): 219-232. {a} Nordic Council Ministers, Store Strandstraede 18, DK-1255 Copenhagen K, Denmark

Umarani, R., A. Bharathi, et al. (1997). Effect of seed treatments on storage life of *Casuarina equisetifolia*. *Journal of Tropical Forest Science* 10(1): 18-23. Dep. Seed Technol., Forest Coll. Res. Inst., Tamil Nadu Agric. Univ., Mettupalayam 641 301, Coimbatore, India

Watanabe, H., T. Watanabe, et al. (1997). Synthetic study on azadirachtin: Part 2. Construction of the decalin moiety with full functionality on B-ring. *Tetrahedron Letters* 38(25): 4429-4432. {a} Dep. Applied Biol. Chem., Graduate Sch. Agric. and Life Sci., Univ. Tokyo, 1-1-1 Yayoi, Bunkyo-ku, Tokyo 113, Japan

White, G. and W. Powell (1997). Cross-species amplification of SSR loci in the Meliaceae family. *Molecular Ecology* 6(12): 1195-1197. {a} Dep. Cell and Mol. Genet., Scottish Crop Res. Inst., Invergowrie, Dundee DD2 5DA, UK

Akhtar, M. and I. Mahmood (1996). Integrated nematode control in potato, *Solanum tuberosum*. *International Pest Control* 38(2): 62-64. {a} Inst. Agriculture, Aligarh Muslim Univ., Aligarh-202002, India

Ambethgar, V. (1996). Effectiveness of neem (*Azadirachta indica* A. Juss) products and insecticides against rice leaf folder, *Cnaphalocrosis medinalis* Guenee. *Journal of Entomological Research New Delhi* 20(1): 83-85. Exp. Res. Farm, Madur, Karaikal Region - 609 607, Pondicherry, India

Anandan, S., V. R. B. Sastry, et al. (1996). Growth rate and nutrient efficiency of growing goats fed urea ammoniated neem (*Azadirachta indica*) seed kernel meal as protein supplement. *Small Ruminant Research* 22(3): 205-212. {a} Livestock Prod. Res., Indian Vet. Res. Inst., Campus Mukteswar-Kumaon, Dist. Nainital 263 138, India

Balasubramanian, P. (1996). Interactions between fruit-eating birds and bird-dispersed plants in the tropical dry evergreen forest of Point Calimere, South India. *Journal of the Bombay Natural History Society* 93(3): 428-441. Salim Ali Cent. Ornithol. Nat. Hist., Kalampalayam-PO, Coimbatore-641 010, India

Benoit, F., A. Valentin, et al. (1996). In vitro antimalarial activity of vegetal extracts used in West African traditional medicine. *American Journal of Tropical Medicine and Hygiene* 54(1): 67-71. {a} Lab. Immunol. Parasitol., Unite de Formation, Recherche des Sciences Pharmaceutiques, 15 Ave. Charles Flahault, F-34060 Montpellier, France

Berjak, P., G. K. Campbell, et al. (1996). Responses of seeds of *Azadirachta indica* (neem) to short-term storage under ambient or chilled conditions. *Seed Science and Technology* 23(3): 779-792. {a} Plant Cell Biol. Res. Unit, Dep. Biol., Univ. Natal, Durban, South Africa

Berjak, P. and D. Dumet (1996). Cryopreservation of seeds and isolated embryonic axes of neem (*Azadirachta indica*). *Cryo Letters* 17(2): 99-104. {a} Plant Cell Biol. Res. Unit, Dep. Biol., Univ. Natal, Durban, Private Bag X10, Dalbridge 4014, South Africa

Bharathi, A., R. Umarani, et al. (1996). Effect of drupe maturity on seed germination and seedling vigour in neem. *Journal of Tropical Forest Science* 9(2): 147-150. Dep. Seed Technology, Tamil Nadu Agric. Univ., Coimbatore 641 003, Tamil Nadu, India

Chander, H., R. R. Singh, et al. (1996). Effect of auxin on number of leaves per cutting and length of main branch in neem (*Azadirachta indica*). *Annals of Biology Ludhiana* 12(1): 57-61. Dep. Agroforestry, CCS Haryana Agric. Univ., Hisar-125 004, India

Chandrasekharan, H., A. Singh, et al. (1996). Land and water management in a degrading micro-watershed in Haryana. *Indian Journal of Agricultural Sciences* 66(7): 429-433. Indian Agric. Res. Inst., New Delhi 110 012, India

Chattopadhyay, R. R. (1996). Possible mechanism of antihyperglycemic effect of *Azadirachta indica* leaf extract. Part IV. *General Pharmacology* 27(3): 431-434. Biometry Res. Unit, Indian Statistical Inst., 203, Barrackpore Trunk Rd., Calcutta 700 035, India

Chattopadhyay, R. R. and S. K. Gupta (1996). Possible mechanism of hepatoprotective activity of *Azadirachta indica* leaf extract: Part I. *Indian Journal of Physiology and Allied Sciences* 50(4): 163-167. Biometry Res. Unit, Indian Statistical Inst., 203 Barrackpore Trunk Rd., Calcutta 700035, India

- Chaturvedi, A. N. and H. M. Behl (1996). Biomass production trials on sodic site. *Indian Forester* 122(6): 439-455. {a} Tata Energy Res. Inst., New Delhi, India
- Chen, C. C., Y. J. Dong, et al. (1996). Deterrent effect of neem seed kernel extract on oviposition of the oriental fruit fly (Diptera: Tephritidae) in Guava. *Journal of Economic Entomology* 89(2): 462-466. {a} Dep. Entomol., Natl. Chung Hsing Univ., Taichung, Taiwan
- Cohen, E., G. B. Quistad, et al. (1996). Cytotoxicity of nimbolide, epoxyazadiradione and other limonoids from neem insecticide. *Life Sciences* 58(13): 1075-1081. {a} Dep. Entomol., Fac. Agric., Hebrew University Jerusalem, Rehovot 76100, Israel
- Contractor, R. M. and V. P. Badanur (1996). Effect of forest vegetation on properties of a vertisol. *Journal of the Indian Society of Soil Science* 44(3): 510-511. {a} Dep. Soil Sci. Agric. Chem., Univ. Agric. Sci., Dharwad, Karnataka 58005, India
- Damayanti, M., K. Susheela, et al. (1996). Effect of plant extracts and systemic fungicide on the pineapple fruit-rotting fungus, *Ceratocystis paradoxa*. *Cytobios* 86(346): 155-165. {a} Dep. Life Sci., Manipur Univ., Imphal 795003, India
- Datta, M. (1996). Potassium changes in soil upon incorporation of leaf prunings of multipurpose tree species in an acid soil of Tripura. *Journal of the Indian Society of Soil Science* 44(3): 398-401. ICAR Res. Complex NEH Region, Lembucherra, Tripura 799210, India
- Dhar, R., H. Dawar, et al. (1996). Effect of volatiles from neem and other natural products on gonotrophic cycle and oviposition of *Anopheles stephensi* and *An. culicifacies* (Diptera: Culicidae). *Journal of Medical Entomology* 33(2): 195-201. {a} Int. Cent. Genet. Eng., Natl. Inst. Immunol. Campus, JNU Complex, Aruna Asif Ali Marg, New Delhi 110 007, India
- Elangovan, A. V., S. K. Gowda, et al. (1996). Effect of dietary neem *Azadirachta indica* kernel meal on nutrient retention, haematology and histopathology in White Leghorn layers. *Indian Journal of Poultry Science* 31(3): 216-219. {a} Cent. Avian Res. Inst., Izatnagar 243 122, India
- Fabry, W., P. Okemo, et al. (1996). Activity of East African medicinal plants against *Helicobacter pylori*. *Chemotherapy* 42(5): 315-317. {a} Inst. Med. Mikrobiol., Univ.-GH Essen, Hufelandstrasse 55, D-45147 Essen, Germany
- Fabry, W., P. Okemo, et al. (1996). Fungistatic and fungicidal activity of East African medicinal plants. *Mycoses* 39(1-2): 67-70. {a} Inst. Medizinische Mikrobiologie, Universitaet-GH Essen, Hufelandstr. 55, D-45147 Essen, Germany
- Firoza, K. and M. A. Maqbool (1996). Effect of plant extracts in the control of *Helicotylenchus dihystra* (Cobb, 1893, Sher, 1961). *Pakistan Journal of Nematology* 14(1): 61-66. Natl. Nematological Res. Cent., Univ. Karachi, Karachi 75270, Pakistan
- Gamene, C. S., H. L. Kraak, et al. (1996). Storage behaviour of neem (*Azadirachta indica*) seeds from Burkina Faso. *Seed Science and Technology* 24(3): 441-448. Cent. Natl. Semences Forestieres, 01 BP 2682, Ouagadougou 01, Burkina Faso
- Gera, M., H. S. Ginwal, et al. (1996). Performance of seventeen different multipurpose tree species under semi arid region of Central India. *Indian Forester* 122(3): 250-257. Div. Silviculture, Trop. Forest Res. Inst., Jabalpur, MP, India
- Gowda, S. K., R. C. Katiyar, et al. (1996). Blood biochemical profile and histopathology of vital organs in rabbits fed on processed neem (*Azadirachta indica*) kernel meal incorporated diets. *Asian Australasian Journal of Animal Sciences* 9(4): 471-476. {a} Div. Avian Nutrition, Central Avian Research Inst., Izatnagar 243122, India
- Gupta, V. P., Govindaiah, et al. (1996). Plant extracts: A non-chemical approach to control *Fusarium* diseases of mulberry. *Current Science Bangalore* 71(5): 406-409. Central Sericultural Res. and Training Inst., Srirampura, Mysore 570 008, India
- Ignatowicz, S. and B. Wesolowska (1996). Repellency of powdered plant material of the Indian neem tree, the Labrador tea, and the sweet-flag, to some stored product pests. *Polskie Pismo Entomologiczne* 65(1-2): 61-67. Warsaw Agric. Univ., Dep. Applied Entomol., ul. Nowoursynowska 166, 02-787 Warszawa, Poland
- Johnson, S., E. D. Morgan, et al. (1996). Development of the major triterpenoids and oil in the fruit and seeds of neem (*Azadirachta indica*). *Annals of Botany London* 78(3): 383-388. {a} Dep. Chem., Keele Univ., Keele, Staffordshire ST5 5BG, UK
- Jood, S., A. C. Kapoor, et al. (1996). Evaluation of some plant products against *Trogoderma granarium* everts in sorghum and their effects on nutritional composition organoleptic characteristics. *Journal of Stored Products Research* 32(4): 345-352. {a} Dep. Entomol., CCS Haryana Agric. Univ., Hisar 125 004, India
- Joshi, A. R., R. N. Ahamed, et al. (1996). Effect of *Azadirachta indica* leaves on testis and its recovery in albino rats. *Indian Journal of Experimental Biology* 34(11): 1091-1094. {a} Dep. Zool., Karnatak University, Dharwad 580 003, India
- Joshi, M. S. and S. R. Thengane (1996). In vitro propagation of *Azadirachta indica* A. Juss (neem) by shoot proliferation. *Indian Journal of Experimental Biology* 34(5): 480-482. Plant Tissue Culture Div., Natl. Chem. Lab., Pune 411 008, India
- Kamaluddin, M. and M. Ali (1996). Effects of leaf area and auxin on rooting and growth of rooted stem cuttings of neem. *New Forests* 12(1): 11-18. Inst. Forstry, Chittagong Univ., Chittagong, Bangladesh

- Khan, A., S. S. Shaikat, et al. (1996). Efficacy of some nematicides for the control of nematodes infesting two wheat varieties. *Scientific Khyber* 9(1): 15-20. {a} Crop Disease Res. Inst., Univ. Karachi, Karachi 75270, Pakistan
- Kroschel, J. and W. Koch (1996). Studies on the use of chemicals, botanicals and *Bacillus thuringiensis* in the management of the potato tuber moth in potato stores. *Crop Protection* 15(2): 197-203. {a} Deutsche Gesellschaft Tech. Zusammenarbeit GmbH, Univ. Hohenheim, 70593 Stuttgart, Germany
- Kumar, C. S. S. R., M. Srinivas, et al. (1996). Limonoids from the seeds of *Azadirachta indica*. *Phytochemistry Oxford* 43(2): 451-455. {a} Vital Mallya Sci. Res. Foundation, PO Box No. 406, K.R. Rd., Bangalore-560-004, India
- Kumar, R. and K. S. Bangarwa (1996). Seed collection and pre-sowing handling methods in *Azadirachta indica* A. Juss. *Annals of Biology Ludhiana* 12(1): 67-70. Dep. Agroforestry, CCS Haryana Agric. Univ., Hisar-125 004, India
- Kumar, R. and K. S. Bangarwa (1996). Seed storability in *Azadirachta indica* A. Juss. *Annals of Biology Ludhiana* 12(1): 62-66. Dep. Agroforestry, CCS Haryana Agric. Univ., Hisar-125 005, India
- Leskovar, D. I. and A. K. Boales (1996). *Azadirachtin*: Potential use for controlling lepidopterous insects and increasing marketability of cabbage. *Hortscience* 31(3): 405-409. Texas Agricultural Exp. Stn., Texas A and M University, 1619 Garner Field Road, Uvalde, TX 78801, USA
- Lowery, D. T., S. Bellerose, et al. (1996). Effect of neem on the growth and development of the obliquebanded leafroller, *Choristoneura rosaceana*. *Entomologia Experimentalis et Applicata* 79(2): 203-209. {a} Agr. Agri-Food Canada, Res. Cent., Summerland, BC V0H 1Z0, Canada
- Mason, J. R. and D. N. Matthew (1996). Evaluation of neem as a bird repellent chemical. *International Journal of Pest Management* 42(1): 47-49. {a} US Dep. Agric., Animal Plant Health Inspection Serv., Denver Wildlife Res. Center, c/o Monell Chemical Senses Center, 3500 Market St., Philadelphia, PA 19104-3308, USA
- Meshram, P. B., N. Kulkarni, et al. (1996). Antifeedant activity of *Azadirachta indica* and *Jatropha curcas* against *Papilio demoleus* Linn. *Journal of Environmental Biology* 17(4): 295-298. Forest Entomol. Div., Tropical Forest Res. Inst., Jabalpur 482 021, India
- Mukherjee, S., N. K. Lohiya, et al. (1996). Purified neem (*Azadirachta indica*) seed extracts (Praneem) abrogate pregnancy in primates. *Contraception* 53(6): 375-378. {a} Int. Cent. Genet. Eng. Biotechnol., Aruna Asaf Ali Marg, New Delhi 110 067, India
- Mukherjee, S. and G. P. Talwar (1996). Termination of pregnancy in rodents by oral administration of Praneem, a purified neem seed extract. *American Journal of Reproductive Immunology* 35(1): 51-56. {a} International Center Genetic Engineering Biotechnol., Aruna Asaf Ali Marg, New Delhi-110 067, India
- Mukherjee, S. N. and R. N. Sharma (1996). *Azadirachtin* induced changes in feeding, dietary utilization and midgut carboxylesterase activity of the final instar larvae of *Spodoptera litura* (Fabricius) (Lepidoptera: Noctuidae). *Journal of Environmental Science and Health Part B Pesticides Food Contaminants and Agricultural Wastes* 31(6): 1307-1319. Entomol. Lab., Natl. Chemical Lab., Pune 411008, India
- Muoghalu, J. I. (1996). The vegetation of a cement manufacturing town in Nigeria after 36 years of limestone quarrying. *Nigerian Journal of Botany* 9-10: 1-8. {a} Department of Botany, Obafemi Awolowo University, Ile-Ife, Nigeria
- Nagalakshmi, D., V. R. B. Sastry, et al. (1996). Performance of broiler chicks fed on alkali-treated neem (*Azadirachta indica*) kernel cake as a protein supplement. *British Poultry Science* 37(4): 809-818. {a} Div. Animal Nutr., Indian Vet. Res. Inst., Izatnagar 243 122, India
- Naumann, K., L. Rankin, et al. (1996). Effects of a neem seed extract against the white pine weevil, *Pissodes strobi* (Coleoptera: Curculionidae), in Sitka and white-Engelmann spruce. *Journal of the Entomological Society of British Columbia* 93: 3-9. {a} Dep. Biol., Langara Coll., 100 W. 49th Ave., Vancouver, BC V5Y 2Z6, Canada
- Ogunwolu, E. O. and A. T. Odunlami (1996). Suppression of seed bruchid (*Callosobruchus maculatus* F.) development and damage on cowpea (*Vigna unguiculata* (L.) Walp.) with *Zanthoxylum zanthoxyloides* (Lam.) Waterm. (Rutaceae) root bark powder when compared to neem seed powder and pirimiphos-methyl. *Crop Protection* 15(7): 603-607. Dep. Crop Production, Univ. Agric., P.M.B. 2373, Makurdi, Nigeria
- Patel, N. L. and S. P. Singh (1996). Dynamics of growth in some agroforestry tree species under south Saurashtra region of Gujarat. *Indian Forester* 122(7): 570-576. {a} Dep. Horticulture, Coll. Agric., Gujarat Agric. Univ., Junagadh, Gujarat
- Patel, Z. P. and J. R. Patel (1996). Effect of botanicals on behavioural response and on growth of the jassid, *Amrasca biguttula biguttula* Ishida. *Indian Journal of Plant Protection* 24(1-2): 28-32. Dep. Entomol., Bansilal Amrutlal Coll. Agric., Gujarat Agric. Univ., Anand Campus, Anand-388 110, Gujarat, India
- Paul, B. N., N. Haque, et al. (1996). Effect of feeding neem seed kernel cake (*Azadirachta indica* A Juss) on rumen enzymes of buffalo. *Indian Veterinary Journal* 73(12): 1283-1285. {a} Div. Nutr., Central Inst. Freshwater Aquaculture, Kausalaganga,

Bhubaneswar 751002, India

Prasad, J., S. Ram, et al. (1996). Effect of different types of nucleus on growth, yield, weed and disease intensity in opium poppy (*Papaver somniferum*). *Indian Journal of Agricultural Sciences* 66(1): 64-66. {a} Narendra Deva Univ. Agric. Technol., Faizabad, UP 224 229, India

Ramji, N., K. Venkatakrishnan, et al. (1996). 11-EPI-azadirachtin H from *Azadirachta indica*. *Phytochemistry Oxford* 42(2): 561-562. {a} Dep. Org. Chem., Indian Inst. Sci., Bangalore 560 012, India

Rao, K. S., B. T. S. Moorthy, et al. (1996). Efficient nitrogen management for sustained productivity in lowland rice (*Oryza sativa*). *Indian Journal of Agronomy* 41(2): 215-220. Div. Agron., Central Rice Res. Inst., Cuttack, Orissa 753 006, India

Rao, M. S., P. P. Reddy, et al. (1996). Potential use of botanicals for the development of formulation of the bio-control fungus *Verticillium lecanii* (Zimm.) Viegas. *Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz* 103(4): 436-439. {a} Entomology Nematology Div., Indian Inst. Horticultural Res., Hessaraghatta Lake, Bangalore-560089, India

Ray, A., B. D. Banerjee, et al. (1996). Modulation of humoral and cell-mediated immune responses by *Azadirachta indica* (Neem) in mice. *Indian Journal of Experimental Biology* 34(7): 698-701. {a} Dep. Pharmacol., Shahdara, Delhi 110 095, India

Sagar, S. K. and S. S. Sehgal (1996). Effects of aqueous extract of deoiled neem (*Azadirachta indica* A. juss) seed kernel and karanja (*Pongamia Glabra* Vent) seed kernel against *Culex quinquefasciatus*. *Journal of Communicable Diseases* 28(4): 260-269. Dep. Zool., Univ. Delhi, Delhi-110 007, India

Samudralwar, D. L. and A. N. Garg (1996). Minor and trace elemental determination in the Indian herbal and other medicinal preparations. *Biological Trace Element Research* 54(2): 113-121. {a} Dep. Chem., Nagpur Univ., Nagpur-440010, India

Shanthi, K., N. P. Mahadevan, et al. (1996). Rooting of cotyledonary scions in *Azadirachta indica* A. Juss. (Neem) seedlings. *Indian Forester* 122(4): 346-347. Seed Technol. Div., Inst. Forest Genet. Tree Breeding, Coimbatore, India

Shanthi, K., L. Manimuthu, et al. (1996). Genetic significance of late flowering forms in neem (*Azadirachta indica* A. Juss.) as reflected by germination studies. *Indian Forester* 122(3): 263-264. Seed Technol. Div., Inst. Forest Genetics and Tree Breeding, Coimbatore, Tamil Nadu, India

Sharma, C. D., K. K. Gadpandey, et al. (1996). Some new hyphomycetes associated with leaf spots of forest plants in Madhya Pradesh, India. *Mycological Research* 100(11): 1388-1392. Mycology Lab., Dep. Botany, Dr. H. S. Gour Univ., Sagar 470003, M.P., India

Shukla, P. K. and A. Haseeb (1996). Effectiveness of some nematicides and oil cakes in the management of *Pratylenchus thornei* on *Mentha citrata*, *M. piperita* and *M. spicata*. *Bioresource Technology* 57(3): 307-310. {a} Central Inst. Medicinal Aromatic Plants, P.O. CIMAP, Lucknow 226 015, India

Sidhu, O. P. and H. M. Behl (1996). Seasonal variation in azadirachtins in seeds of *Azadirachta indica*. *Current Science* Bangalore 70(12): 1084-1086. Dep. Tree Biol., Natl. Bot. Res. Inst., Lucknow 226 001, India

Silva, G. S. D. (1996). Occurrence of *Sclerotium rolfsii* in neem (*Azadirachta indica*). *Fitopatologia Brasileira* 21(4): 522. UEMA, Caixa Postal 2002, 65041-970 Sao Luis, MA, Brazil

Singh, D., R. Kumar, et al. (1996). Relationship of morphological character combination with agroclimatic conditions in *A. Juss.* *Crop Research Hisar* 11(1): 117-119. Dep. Agroforestry, CCS Haryana Agric. Univ., Hisar 125 004, India

Singh, J. P., V. S. Yadav, et al. (1996). Nitrogen release from leaves of leguminous and nonleguminous tree species in sandy loam soil. *Arid Soil Research and Rehabilitation* 10(3): 257-264. {a} Dep. Soil Sci., CCS Haryana Agric. Univ., Hisar 125 004, India

Singh, K., A. Singh, et al. (1996). Molluscicidal activity of neem (*Azadirachta indica* A. Juss). *Journal of Ethnopharmacology* 52(1): 35-40. {a} Dep. Zool., University Gorakhpur, Gorakhpur 273 009, UP, India

Singh, K. and D. K. Singh (1996). Effect of *Azadirachta indica* (neem) on biochemical parameters in the ovotestis of *Lymnaea acuminata*. *Malaysian Applied Biology* 24(2): 7-11. {a} Dep. Zool., Univ. Gorakhpur, Gorakhpur-273 009, U.P., India

Singh, N., A. K. Mishra, et al. (1996). Use of neem cream as a mosquito repellent in tribal areas of central India. *Indian Journal of Malariology* 33(2): 99-102. Malaria Res. Cent., Med. Coll. Build., Jabalpur-482 003, India

Sundaram, K. M. S. (1996). Root uptake, translocation, accumulation and dissipation of the botanical insecticide, azadirachtin, in young spruce trees. *Journal of Environmental Science and Health Part B Pesticides Food Contaminants and Agricultural Wastes* 31(6): 1289-1306. Canadian Forest Service, Natural Resources Canada, 1219 Queen Street East, Box 490, Sault Ste. Marie, ON P6A 5M7, Canada

Talikal, T. S., S. K. Dwivedi, et al. (1996). In vitro screening of some indigenous plants against *Trypanosoma evansi*. *Indian Journal of Animal Sciences* 66(1): 18-21. Indian Veterinary Res. Inst., Izatnagar, Uttar Pradesh 243 122, India

- Tilander, Y. (1996). Competition for and conservation of water and nutrients in agroforestry systems in semi-arid West Africa. Sveriges Lantbruksuniversitet Institutionen for Ekologi och Miljovard Rapport(86): AGINATION VARIES. Dep. Ecology Environ. Res., SLU, S-750 07 Uppsala, Sweden
- Uniyal, K. and D. P. Uniyal (1996). Mycoflora of Neem seeds. Indian Forester 122(5): 423-427. {a} Forest Pathol. Div., Forest Res. Inst., Dehra Dun, India
- Verma, A. K., V. R. B. Sastry, et al. (1996). Chevon characteristics of goats fed diets with water washed neem (*Azadirachta indica*) seed kernel cake. Small Ruminant Research 19(1): 55-61. {a} Anim. Nutr. Division, Indian Vet. Res. Inst., Izatnagar 243 122, India
- Wolinsky, L. E., S. Mania, et al. (1996). The inhibiting effect of aqueous *Azadirachta indica* (neem) extract upon bacterial properties influencing in vitro plaque formation. Journal of Dental Research 75(2): 816-822. Sect. Oral Biol., Univ. Calif. Los Angeles, Sch. Dent., 10833 Le Conte Ave., Los Angeles, CA 90095-1668, USA
- Aggarwal, S. K. and V. K. Dhawan (1995). Some new medicinal properties of neem: A multipurpose farm forestry tree. Indian Forester 121(11): 1003-1005. Silviculture Div., Forest Res. Inst., Dehra Dun, India
- Ahmad, I., F. Ahmed, et al. (1995). In vitro antimicrobial activity of leaf and bark extracts of *Azadirachta indica* A. Juss. Indian Veterinary Medical Journal 19(3): 204-206. {a} Inst. Agric., Aligarh Muslim Univ., Aligarh 202002, India
- Ahmad, S. K. and J. S. Prasad (1995). Efficacy of foliar extracts against pre- and post-harvest diseases of sponge-gourd fruits. Letters in Applied Microbiology 21(6): 373-375. {a} Plant Pathol. Microbiol. Lab., Univ. Dep. Botany, L.N. Mithila Univ., Darbhanga 846004, India
- Akhtar, M. (1995). Biological control of the root-knot nematode *Meloidogyne incognita* in tomato by the predatory nematode *Monochus aquaticus*. International Pest Control 37(1): 18-19. Dep. Botany, Aligarh Muslim Univ., Aligarh 202 002, India
- Akhtar, M. and I. Mahmood (1995). Evaluation of a neem based product against root-knot nematode, *Meloidogyne incognita*. Tests of Agrochemicals and Cultivars(16): 6-7. Inst. Agric., Dep. Bot., Aligarh Muslim Univ., Aligarh-202002, India
- Allotey, J. and J. A. Dankwah (1995). Some aspects of the biology and control of the cowpea weevil, *Callosobruchus maculatus* (F.) on Bambara groundnut and cowpea. Insect Science and its Application 16(2): 223-228. {a} Dep. Zoology, Univ. Ghana, P.O. Box 67, Legon, Ghana
- Amorose, T. (1995). Larvicidal efficacy of neem (*Azadirachta indica* Linn) oil and defatted cake on *Culex quinquefasciatus* Say. Geobios Jodhpur 22(4): 169-173. P.G. Dep. Zool., Loyola Coll., Madras-600 034, India
- Awasthy, K. S., O. P. Chaurasia, et al. (1995). Genotoxic effects of crude extract of neem (*Azadirachta indica*) in bone marrow cells of mice. Cytologia Tokyo 60(2): 189-193. {a} Dep. Zool., K.K.M. Coll., Pakur-816 107, India
- Bankole, S. A. and A. Adebajo (1995). Inhibition of growth of some plant pathogenic fungi using from some Nigerian plants. International Journal of Tropical Plant Diseases 13(1): 91-95. Dep. Biological Sci., Ogun State Univ, P.M.B. 2002, Ago-Iwoye, Nigeria
- Bhardwaj, S. D. and G. Chand (1995). Storage of neem seeds: Potential and limitations for germplasm conservation. Indian Forester 121(11): 1009-1011. Dep. Silviculture and Agroforestry, Univ. Horticultural and Forestry, Nauni, Solan, Himachal Pradesh, India
- Bhatnagar, A. and V. K. Sharma (1995). Relative efficacy and residual toxicity of margosa (*Azadirachta indica*) and indian beech (*Pongamia pinnata*) oils in stemborer (*Chilo partellus*) of maize (*Zea mays*). Indian Journal of Agricultural Sciences 65(9): 691-693. {a} Zonal Agric. Res. Stn., Indira Gandhi Krishi Vishwa Vidyalyaya, Jagdalpur, Madhya Pradesh 494 005, India
- Biswas, S., P. Singh, et al. (1995). Neem (*Azadirachta indica* A. Juss.): A versatile multipurpose tree. Indian Forester 121(11): 1057-1062. Systematic Bot., Bot. Div., Forest Res. Inst., Dehra Dun, India
- Chakraborty, R. and G. Konger (1995). Root-rot of neem (*Azadirachta indica*) caused by *Ganoderma applanatum*. Indian Forester 121(11): 1081-1083. Dep. Applied Bot. and Biotechnol., Gauhati Univ., Gauhati, Assam, India
- Chandel, R. S., R. Chander, et al. (1995). Non-edible oils as feeding-deterrent to apple-defoliating beetle (*Brahmina coriacea*). Indian Journal of Agricultural Sciences 65(10): 778-779. {a} Himachal Pradesh Krishi Vishvavidyalaya, Palampur 176 062, India
- Chattopadhyay, R. R. (1995). Hypolipidemic activity of *Azadirachta indica* leaf extract in rats. Proceedings of the Indian National Science Academy Part B Biological Sciences 61(4): 281-284. Biometry Res. Unit, Indian Statistical Inst., 203 Barrackpore Trunk Rd., Calcutta 700 035, India
- Chattopadhyay, R. R. (1995). Inhibition of liver lipid peroxidation by *Azadirachta Indica* leaf extract during experimental inflammation in rats. Indian Journal of Physiology and Allied Sciences 49(2): 82-86. Biometry Res. Unit, Indian Statistical Inst., 203, Barrackpore Trunk Road, Calcutta-700 035, India

- Chattopadhyay, R. R., T. K. Bhattacharyya, et al. (1995). Studies on the effect of a fraction of an alcoholic extract from fresh leaves of *Azadirachta indica* (Beng. Neem) on serum inorganic phosphorus and free fatty acid content in experimental rats. *Indian Journal of Physiology and Allied Sciences* 49(1): 40-45. {a} Dep. Pharmacol., Sch. Tropical Med., Calcutta 700 073, India
- Delate, K. M. and J. K. Grace (1995). Susceptibility of neem to attack by the Formosan subterranean termite, *Coptotermes formosanus* Shir. (Isopt., Rhinotermitidae). *Journal of Applied Entomology* 119(2): 93-95. {a} Dep. Entomol., Univ. Hawaii, 3050 Maile Way, Honolulu, HI 96822-2271, USA
- Denholm, A. A., L. Jennens, et al. (1995). Chemistry of Insect Antifeedants from *Azadirachta Indica* (Part 19): 1A Potential Relay Route for the Synthesis of Azadirachtin. *Tetrahedron* 51(23): 6591-6604. {a} Dep. Chem., Univ. Cambridge, Lensfield Rd., Cambridge CB2 1EW, UK
- Dhanapakiam, P. and A. Shanazbegun (1995). Anti-feeding properties of some leaf extracts against *Spodoptera litura* F. (Noctuidae: Lepidoptera) on castor leaf. *Journal of Environmental Biology* 16(4): 277-281. PG and Res. Dep. Zool., Alamelu Angappan Coll., Komarapalayam 638-183, India
- Dimetry, N. Z. and H. F. M. A. El (1995). Neem Azal-F as an inhibitor of growth and reproduction in the cowpea aphid *Aphis craccivora* Koch. *Journal of Applied Entomology* 119(1): 67-71. {a} Dep. Pests Plant Protection, Natl. Res. Cent., Tahrir St., Dokki, Cairo, Egypt
- Dunkel, F. V., A. Serugendo, et al. (1995). Influence of insecticidal plant material used during storage on sensory attributes and instrumental hardness of dry edible beans (*Phaseolus vulgaris* L.). *Plant Foods for Human Nutrition Dordrecht* 48(1): 1-16. {a} Dep. Entomol., Montana State Univ., Bozeman, MT 59717, USA
- Durairaj, C. and M. S. Venugopal (1995). Combined effect of margosa oil and diflubenzuron on tobacco caterpillar (*Spodoptera litura*) and gram podborer (*Helicoverpa armigera*). *Indian Journal of Agricultural Sciences* 65(4): 301-304. {a} Natl. Pulses Res. Cent., Tamil Nadu Agric. Univ., Vamban Colony 622 303, India
- Gerard, P. J. and L. D. Ruf (1995). Effect of a neem (*Azadirachta indica* A. Juss, Meliaceae) extract on survival and feeding of larvae of four keratinophagous insects. *Journal of Stored Products Research* 31(2): 111-116. {a} New Zealand Pastoral Agric. Res. Inst. Ltd., Ruakura Agric. Res. Cent., Private Bag 3123, Hamilton, New Zealand
- Govindachari, T. R., G. Suresh, et al. (1995). A direct preparative high performance liquid chromatography procedure for the isolation of major triterpenoids and their quantitative determination in neem oil. *Journal of Liquid Chromatography* 18(17): 3465-3471. Centre Agrochem. Res., SPIC Sci. Found., 110 Mount Road, Madras 600 032, India
- Gupta, G. N. (1995). Rain-water management for tree planting in the Indian Desert. *Journal of Arid Environments* 31(2): 219-235. Divison Forest Ecology Desert Development, Arid Forest Research Institute, New Pali Road, Basami, Jodhpur-342 005, India
- Gupta, G. N., N. K. Limba, et al. (1995). Micro-catchment water harvesting for raising neem in arid region. *Indian Forester* 121(11): 1022-1032. Forest Ecol. and Desert Dev. Div., Arid Forest Res. Inst., Jodhpur, Rajasthan, India
- Gupta, P. K., R. S. Pal, et al. (1995). Initial flowering and fruiting of neem national provenance trial. *Indian Forester* 121(11): 1063-1068. Non-Wood Forest Prod. Div., Arid Forest Res. Inst., Jodhpur, Rajasthan, India
- Hegde, N. G. (1995). Neem and small farmers: Constraints at grass root level. *Indian Forester* 121(11): 1040-1048. BAIF Dev. Res. Found., Pune, Maharashtra, India
- Jambhale, N. D., S. C. Patil, et al. (1995). Performance of eight tree species in saline soil at Rahuri. *Journal of Maharashtra Agricultural Universities* 20(1): 118. Mahatma Phule Krishi, Vidyapeeth, Rahuri 413 722, India
- Jattan, S. S., S. Kumar, et al. (1995). Margoculture: A vital component for plant health in future. *Indian Forester* 121(11): 993-996. Indian Council Forestry Res. and Educ., Dehra Dun, India
- Jattan, S. S., S. Kumar, et al. (1995). Perspectives in intensive management of neem plantations. *Indian Forester* 121(11): 981-988. Indian Council Forestry Res. and Educ., Dehra Dun, India
- Jha, M. and L. D. Chaudhari (1995). A note on increasing the viability of neem seed. *Indian Forester* 121(11): 1085-1086. {a} Plantation Inventory Unit, F.D.C.M. Ltd., Nagpur, Maharashtra, India
- Joshi, A. R., R. N. Ahamed, et al. (1995). Changes induced in the epididymis of laboratory rat by *Azadirachta indica* leaves. *Journal of Advanced Zoology* 16(1): 34-41. {a} Dep. Zool., Karnatak Univ. Dharward-580 003, India
- Jyani, D. B., N. C. Patel, et al. (1995). Bioefficacy of neem and synthetic insecticides on serpentine leafminer (*Liriomyza trifolii*) (Diptera: Agromyzidae) infesting pea (*Pisum sativum*). *Indian Journal of Agricultural Sciences* 65(5): 373-376. Dep. Entomol., Bansilal Amrutlal Coll. Agriculture, Gujarat Agricultural Univ., Campus Anand 388 110, India
- Kasturi, M., B. Manivannan, et al. (1995). Changes in epididymal structure and function of albino rat treated with *Azadirachta*



indica leaves. *Indian Journal of Experimental Biology* 33(10): 725-729. {a} National Research Centre Camel, PB No. 07, Jorbeer, Bikaner 334 001, India

Khanna, N., M. Goswami, et al. (1995). Antinociceptive action of *Azadirachta indica* (neem) in mice: Possible mechanisms involved. *Indian Journal of Experimental Biology* 33(11): 848-850. {a} Dep. Pharmacol., U.C.M.S. and G.T.B. Hosp., Shahdara, Delhi 110 095, India

Koot, W. J. and S. V. Ley (1995). Chemistry of Insect Antifeedants from *Azadirachta Indica* (Part 18): Demethylation and Methylation of the C-8 Position of the Decalin Portion of Azadirachtin. *Tetrahedron* 51(7): 2077-2090. {a} Dep. Chem., Univ. Cambridge, Lensfield Rd., Cambridge CB2 1EW, UK

Koul, O. and J. S. Shankar (1995). Systemic uptake of azadirachtin into *Ricinus communis* and its effects on *Spodoptera litura* larvae. *Indian Journal of Experimental Biology* 33(11): 865-867. Regional Res. Lab., Canal Road, Jammu 180 001, India

Krishnan, N., D. Ravi, et al. (1995). Effect of neem litter addition on free nitrogen fixers and fungi in soil and on plant (Fenugreek) growth. *Advances in Plant Sciences* 8(1): 65-70. {a} Dep. Botany, P. S. G. Arts Coll., Coimbatore-640 014, India

Kumar, R., M. S. Panwar, et al. (1995). Comparison of plant products with fungicides for the control of ergot of pearl millet. *Crop Research Hisar* 10(1): 90-92. Dep. Plant Pathol., CCS Haryana Agric. Univ., Hisar-125 005, India

Kumar, S. and S. S. Jattan (1995). Neem: A green contraceptive. *Indian Forester* 121(11): 1006-1008. Indian Council Forestry Res. and Educ., Dehra Dun, India

Langewald, J., R. Scherer, et al. (1995). Repellent effects of different products of the neem tree on the locust, *Nomadacris septemfasciata* Serv., in maize fields in the southwestern parts of Madagascar. *Anzeiger fuer Schaedlingskunde Pflanzenschutz Umweltschutz* 68(3): 55-57. {a} Interntional Inst. Tropical Agric., Plant Health Management Div., B.P. 08-0932 Cotonou, Benin, Germany

Laouali, G., C. E. Delisle, et al. (1995). Preliminary investigation of wastewater re-cycling in Nigerian nurseries. *Secheresse Montrouge* 6(2): 201-205. {a} Dep. Genie Civil Sect. Genie Environement Ecole Polytechnique, 2900 Edouard-Montpetit CP 6079, suc. Centre-ville, Montreal, PQ H3C 3A7, Canada

Lowery, D. T. and M. B. Isman (1995). Toxicity of Neem to natural enemies of aphids. *Phytoparasitica* 23(4): 297-306. {a} Agric. Agri-Food Canada, Pest Management Res. Cent., Vineland Station, ON L0R 2E0, Canada

Meshram, P. B. (1995). Evaluation of some medicinal and natural plant extracts against teak skeletonizer, *Eutectona machaeralis* Walk. *Indian Forester* 121(6): 528-532. Forest Entomol. Div., Tropical Forest Res. Inst., Jabalpur, Madhya Pradesh, India

Mishra, A. K., N. Singh, et al. (1995). Use of neem oil as a mosquito repellent in tribal villages of Mandla District, Madhya Pradesh. *Indian Journal of Malariology* 32(3): 99-103. {a} Malaria Res. Cent., Med. Coll. Build., Jabalpur-482 003, India

Mishra, R. N. (1995). Neem improvement research at Arid Forest Research Institute, Jodhpur. *Indian Forester* 121(11): 997-1002. Arid Forest Res. Inst., Jodhpur, Rajasthan, India

Mohan, V., N. Verma, et al. (1995). Distribution of VAM fungi in nurseries and plantations of neem (*Azadirachta indica*) in arid zone of Rajasthan. *Indian Forester* 121(11): 1069-1076. {a} Div. Silviculture, Arid Forest Res. Inst., Jodhpur, Rajasthan, India

Mohanty, A. K., A. K. Kar, et al. (1995). Efficacy of crude leaf extracts of some selected plants in controlling brinjal blight and fruit rot pathogen, *Phomopsis vexans*. *Crop Research Hisar* 9(3): 447-448. Dep. Plant Pathol., O.U.A.T., Bhubaneswar-3, India

Nagpal, B. N., A. Srivastava, et al. (1995). Control of mosquito breeding using wood scrapings treated with neem oil. *Indian Journal of Malariology* 32(2): 64-69. Malaria Res. Centre, 20-Madhuvan, Delhi 110 092, India

Nakano, T., R. Alonso, et al. (1995). A Facile Access to Optically Active Ring C Aromatic Diterpene Derivatives. Highly Efficient Synthesis of (+)-12-Methyl-7-oxopodocarpa-8,11,13-triene-13-carboxylic Acid and (+)-13-Methyl-7-oxopodocarpa-8,11,13-triene-12-carboxylic Acid from Manool. *Tetrahedron Letters* 36(22): 3801-3804. {a} Centro Quimica, Inst. Venezolano Investigaciones Cientificas, Apartado 21827, Caracas 1020-A, Venezuela

Naumann, K. and M. B. Isman (1995). Evaluation of neem *Azadirachta indica* seed extracts and oils as oviposition deterrents to noctuid moths. *Entomologia Experimentalis et Applicata* 76(2): 115-120. {a} Dept. Biol., Langara Coll., 100 West 49th Ave., Vancouver, B.C. V5Y 2Z6, Canada

Nisbet, A. J., A. J. Mordue, et al. (1995). Detection of (22,23-3H-2)dihydroazadirachtin binding sites on *Schistocerca gregaria* (Forsk.) testes membranes. *Insect Biochemistry and Molecular Biology* 25(5): 551-557. {a} Dep. Zool., Aberdeen Univ., Tillydrone Ave., Aberdeen AB9 2TN, UK

Noran, A. M., R. A. Ahmad, et al. (1995). Molluscicidal efficacy of *Azadirachta indica* A. Juss extract. *Malaysian Applied Biology* 24(1): 29-33. Dep. Zool., Fac. Life Sci., Univ. Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia

Nwosu, M. O. and J. I. Okafor (1995). Preliminary studies of the antifungal activities of some medicinal plants against

Basidiobolus and some other pathogenic fungi. *Mycoses* 38(5-6): 191-195. {a} Dep. Botany, Univ. Nigeria, PMB 006, Nsukka, Enugu State, Nigeria

Pal, M. (1995). Clonal approaches for yield improvement in neem: Strategies and protocols for selective use of genetic diversity. *Indian Forester* 121(11): 1033-1039. Plant Physiol. Discipline, Forest Res. Inst., Dehra Dun, India

Patel, P. V., S. Y. Daftardar, et al. (1995). Laboratory evaluation of neem (*Azadirachta indica*) oil and its fractions on nitrification. *Journal of the Indian Society of Soil Science* 43(1): 127-129. Dep. Agric. Chem. and Soil Sci., Gujarat Agric. Univ., Navsari, Gujarat 396 450, India

Preetha, N., R. Yasodha, et al. (1995). Peroxidase isoenzymes as markers of organogenesis in *Azadirachta indica* Juss. *Indian Journal of Plant Physiology* 38(1): 92-93. Div. Plant Biotechnol., Inst. Forest Genetics Tree Breeding, Coimbatore-641002, India

Puri, S., K. S. Bangarwa, et al. (1995). Influence of multipurpose trees on agricultural crops in arid regions of Haryana, India. *Journal of Arid Environments* 30(4): 441-451. Dep. Forestry, Haryana Agric. Univ., Hisar 125 004, India

Pushpkar, B. P. and G. S. Babeley (1995). A note on twin seedlings in neem (*Azadirachta indica* A. Juss.). *Indian Forester* 121(11): 1084. Dep. Bot., Brahamanand Mahavidyalaya, Rath-Hamirpur, UP, India

Raizada, A. and M. Padmaiah (1995). Coppice growth from tree species growing in an energy plantation: Effect of spacing. *Indian Forester* 121(7): 613-619. {a} Central Soil Water Conserv. Res. Training Inst., Dehra Dun, India

Rao, D. R., R. Reuben, et al. (1995). Development of combined use of neem (*Azadirachta indica*) and water management for the control of culicine mosquitoes in rice fields. *Medical and Veterinary Entomology* 9(1): 25-33. {a} Cent. Res. Med. Entomol., Post Box No. 11, No. 4 Sarojini Street, Chinna Chokkikulam, Madurai-625 002, India

Rao, M. S., P. P. Reddy, et al. (1995). Effect of integration of endomycorrhiza (*Glomus mossae*) and neem cake on the control of root-knot nematode on tomato. *Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz* 102(5): 526-529. Nematol. Biofertilizer Lab., Indian Inst. Hortic. Res., Hessaraghatta Lake, Bangalore 560 089, India

Rawat, G. S. (1995). Neem (*Azadirachta indica*): Nature's drugstore. *Indian Forester* 121(11): 977-980. Non-Wood Forest Prod. Div., Forest Res. Inst., Dehra Dun, India

Roger, C., C. Vincent, et al. (1995). Mortality and predation efficiency of *Coleomegilla maculata lengi* Timb. (Col., Coccinellidae) following application of Neem extracts (*Azadirachta indica* A. Juss., Meliaceae). *Journal of Applied Entomology* 119(6): 439-443. {a} Statgion Recherches, Agric. Canada, 430 Boul. Gouin, Saint-Jean-Sur-Richelieu, PQ JU3B 3E6, Canada

Sauphanor, B., C. Lenfant, et al. (1995). Effects of a neem seed extract (*Azadirachta indica* A. Juss) on the development of the Dermoptera, *Forficula auricularia* L. *Journal of Applied Entomology* 119(3): 215-219. INRA, Stn. Recherches Zool. Apidol., Domaine St. Paul, 84 143 Montfavet Cedex, France

Sharma, S. K., V. K. Dua, et al. (1995). Field studies on the mosquito repellent action of neem oil. *Southeast Asian Journal of Tropical Medicine and Public Health* 26(1): 180-182. {a} Malaria Res. Cent., BHEL Complex, Ranipur, Hardwar-249403, India

Sidhu, D. S. (1995). Neem in agroforestry as a source of plant derived chemicals for pest management. *Indian Forester* 121(11): 1012-1021. Dep. Forestry and Natural Resources, Punjab Agric. Univ., Ludhiana, Punjab, India

Singh, B. G., N. P. Mahadevan, et al. (1995). Multiple seedling development in neem (*Azadirachta indica*). *Indian Forester* 121(11): 1049-1052. Inst. Forest Genetics and Tree Breeding, Coimbatore, Tamil Nadu, India

Singh, K., A. Singh, et al. (1995). Molluscicidal activity of different combinations of the plant products used in the molluscicide Pestoban. *Biological Agriculture and Horticulture* 12(3): 253-261. Dep. Zool., Univ. Gorakhpur, Gorakhpur 273 009, India

Singh, K. and D. K. Singh (1995). Effects of neem (*Azadirachta indica*) on fecundity, hatchability and survivability of snails (*Lymnaea acuminata*). *Malaysian Applied Biology* 24(1): 19-22. {a} Dep. Zool., Univ. Gorakhpur, Gorakhpur 273 009, U.P., India

Sohni, Y. R., P. Kaimal, et al. (1995). Prophylactic therapy of *Salmonella typhi* septicemia in mice with a traditionally prescribed crude drug formulation. *Journal of Ethnopharmacology* 45(2): 141-147. {a} Dep. Biol., Ala. A and M Univ., Normal, AL 37662, USA

Suharti, M., Asmaliyah, et al. (1995). Neem trees as a natural insecticides resourced to control forest pest. *Buletin Penelitian Hutan*(589): 1-26. For. Nat. Conserv. Res. Dev. Cent., Bogor, Indonesia

Sundararaj, R., S. Murugesan, et al. (1995). Efficacy of neem seed oil against the babul whitefly *Acaudaleyrodes rachipora* (Singh) (Aleyrodidae: Homoptera). *Indian Forester* 121(11): 1077-1080. Div. Forest Prot., Arid Forest Res. Inst., Jodhpur, Rajasthan, India

Suwalka, R. L. and F. M. Qureshi (1995). Amelioration of some sodic soils in arid regions of Rajasthan. *Journal of the Indian Society of Soil Science* 43(4): 660-662. {a} Agric. Res. Stn., Ummeganj, Kota, Rajasthan 324 007, India

Talwar, G. P., R. Pal, et al. (1995). Safety of intrauterine administration of purified neem seed oil (Praneem Vilci) in women and effect of its co-administration with the heterospecies dimer birth control vaccine on antibody response to human chorionic gonadotropin. *Indian Journal of Medical Research* 102(Aug.): 66-70. {a} Dep. Obstetrics and Gynaecol., Postgraduate Inst. Med. Educ. Res., Chandigarh 160012, India

Tandan, S. K., S. Gupta, et al. (1995). Safety evaluation of *Azadirachta indica* seed oil, a herbal wound dressing agent. *Fitoterapia* 66(1): 69-72. {a} Div. Pharmacol. Toxicol., Indian Vet. Res. Inst., Izatnagar-243 122, India

Tanzubil, P. B. (1995). Effects of neem *Azadirachta indica* A. Juss) extracts on food intake and utilisation in the African armyworm, *Spodoptera exempta* (Walker). *Insect Science and its Application* 16(2): 167-170. Savanna Agricultural Res. Inst., Managa Station, P.O. Box 46, Bawku, Ghana

Tappertzhofen, S. (1995). On the effect of neem products on *Bemisia tabaci* using different adjuvants. *Anzeiger fuer Schaedlingskunde Pflanzenschutz Umweltschutz* 68(6): 137-139. Universitaet Giessen, Inst. Phytopathologie Angewandte Zoologie, Ludwigstr. 23, D-35390 Giessen

Thakur, K. D., N. N. Khune, et al. (1995). Inhibition of some cotton pathogens by plant extracts. *PKV Research Journal* 19(1): 39-41. {a} Betelvine Res. Station, Divthane Akot, India

Thejavathi, R., S. R. Yakkundi, et al. (1995). Determination of azadirachtin by reversed-phase high-performance liquid chromatography using anisole as internal standard. *Journal of Chromatography A* 705(2): 374-379. {a} Vittal Mallya Sci. Res. Found., P.O. Box 406, K.R. Rd., Bangalore 560 004, India

Tilander, Y., G. Ouedraogo, et al. (1995). Impact of tree coppicing on tree-crop competition in parkland and alley farming systems in semiarid Burkina Faso. *Agroforestry Systems* 30(3): 363-378. {a} Swedish Univ. Agric. Sci., Dep. Ecol. Environ. Res., P.O. Box 7072, S-750 07 Uppsala, Sweden

Tiyagi, S. A. and M. M. Alam (1995). Efficacy of oil-seed cakes against plant-parasitic nematodes and soil-inhabiting fungi on mungbean and chickpea. *Bioresource Technology* 51(2-3): 233-239. {a} Dep. Botany, Aligarh Muslim University, Aligarh 202002, India

Vats, R. and S. N. Nandal (1995). Evaluation of differently prepared plant extracts as bare-root dip treatment of tomato seedlings against *Meloidogyne javanica*. *Crop Research Hisar* 9(1): 123-128. Dep. Nematol., CCS Haryana Agric. Univ., Hisar-125 004, India

Veerendra, H. C. S. (1995). Variation studies in provenances of *Azadirachta indica* (the neem tree). *Indian Forester* 121(11): 1053-1056. Inst. Wood Sci. and Technol., Malleswaram, Bangalore, Karnataka, India

Verma, A. K., V. R. B. Sastry, et al. (1995). Feeding of water washed neem (*Azadirachta indica*) seed kernel cake to growing goats. *Small Ruminant Research* 15(2): 105-111. {a} Animal Nutrition Div., Indian Veterinary Res. Inst., Izatnagar 243 122, India

Yakkundi, S. R., R. Thejavathi, et al. (1995). Variation of azadirachtin content during growth and storage of neem (*Azadirachta indica*) seeds. *Journal of Agricultural and Food Chemistry* 43(9): 2517-2519. {a} Vittal Mallya Scientific Res. Found., P.O. Box 406, K. R. Road, Bangalore 560004, India

Zimmerman, R. J., D. C. Sclar, et al. (1995). Toxicity of neem-derived insecticides to various life stages of the elm leaf beetle. *Journal of Arboriculture* 21(4): 181-186. {a} Rogers Mesa Res. Cent., 3060 Highway 92, Hotchkiss, CO 81419, USA

Aggarwal, R. K., P. Kumar, et al. (1994). Effect of effluents of textile industry on the growth of tree species and soil properties in an arid environment. *Indian Forester* 120(1): 40-47. Central Arid Zone Research Inst., Jodhpur, Rajasthan, India

Akpulu, I. N., J. D. Dada, et al. (1994). Antibacterial activities of aqueous extracts of some Nigerian medicinal plants. *Nigerian Journal of Botany* 7: 45-48. Dep. Pharmaceutics and Pharmaceutical Microbiol., Ahmadu Bello Univ., Zaira, Nigeria

Ali, B. H. (1994). Toxicology of *Azadirachta indica*. *Journal of Ethnopharmacology* 42(1): 71-72. Dep. Pharmacol., Fac. Med., Al-Arab Med. Univ., P.O. Box 7240, Benghazi, Libya

Allan, E. J., J. P. Eeswara, et al. (1994). The production of azadirachtin by in-vitro tissue cultures of neem, *Azadirachta indica*. *Pesticide Science* 42(3): 147-152. Dep. Zool., Univ. Aberdeen, Tillydrone Ave., Aberdeen AB9 2TN, UK

Atawodi, S. E. and B. Spiegelhalter (1994). Precursors of N-nitroso compounds in some Nigerian medicinal plants. *Cancer Letters* 79(1): 107-115. {a} Walther Straub Inst. Pharmacol. Toxicol., Nussbaumstr. 26, D-80336 Munich, Germany

Babu, R. S., D. Dorcus, et al. (1994). Possible control of tukra disease in mulberry using aqueous plant extracts of natural pesticide origin. *Journal of Sericultural Science of Japan* 63(3): 175-182. Dep. Biotechnol., Sch. Life Sci., Bharathidasan Univ., Tiruchirapalli-620 024, Tamilnadu, India

Chattopadhyay, R. R., S. K. Sarkar, et al. (1994). A comparative evaluation of some anti-inflammatory agents of plant origin. *Fitoterapia* 65(2): 146-148. Biometry Res. Unit, Indian Statistical Inst., 203 Barrackpore Trunk Rd., Calcutta 700 035, India

- Das, S. S., P. S. Banerjee, et al. (1994). Efficacy of a herbal compound against sarcoptic mange in goats. *Tropical Animal Health and Production* 26(2): 117-118. Dep. Parasitol., Coll. Vet. Sci., GB Pant Univ. Agric. Technol., Pantnagar-263145, India
- Deswal, A. K., R. R. Singh, et al. (1994). Comparison of some important multipurpose tree species for root and shoot length under nursery condition. *Crop Research Hisar* 8(3): 585-588. Dep. Agro-Forestry, CCS Haryana Agric. Univ., Hisar-125 004, India
- Dilawari, V. K., C. P. W. Zebitz, et al. (1994). Effect of azadirachtin and meliandioli on pea aphid, *Acyrtosiphon pisum* Scop. and its predator, *Coccinella septempunctata* L. *Journal of Insect Science* 7(2): 205-207. {a} Dep. Entmol., Punjab Agric. Univ., Ludhiana-141 004, India
- Ekpo, E. J. A. and K. M. Banjoko (1994). Efficacy of Fernasan D and wood ash in the control of seed-borne fungi, pre-emergence mortality and seedling blight of maize. *Discovery and Innovation* 6(1): 84-88. {a} Dep. Crop Sci., Univ. Zimbabwe, PO Box MP 167, Mount Pleasant, Harare, Zimbabwe
- Garg, S., G. Doncel, et al. (1994). Synergistic spermicidal activity of neem seed extract, reetha saponins and quinine hydrochloride. *Contraception* 50(2): 185-190. {a} Natl. Inst. Immunol., Aruna Asaf Ali Road, JNU Complex, New Delhi-110 067, India
- Garg, S., G. P. Talwar, et al. (1994). Comparison of extraction procedures on the immunocontraceptive activity of neem seed extracts. *Journal of Ethnopharmacology* 44(2): 87-92. {a} Natl. Inst. Immunol., Aruna Asaf Ali Rd., New Delhi 110 067, India
- Grossman, R. B. and S. V. Ley (1994). Chemistry of insect antifeedants from *Azadirachta indica*: Part 17. Synthesis of model compounds of azadirachtin: Unusual effect of remote substituents on the course of the oxidative ring contraction reaction. *Tetrahedron* 50(39): 11553-11568. Dep. Chem., Univ. Cambridge, Lensfield Road, Cambridge CB2 1EW, UK
- Grossman, R. B. and S. V. Ley (1994). Chemistry of Insect Antifeedants from *Azadirachta Indica* (Part 16): Synthesis of Several Derivatives of Azadirachtin Containing Fluorescent or Immunogenic Reporter Groups. *Tetrahedron* 50(29): 8871-8884. {a} Dep. Chem., Univ. Chem. Lab., Lensfield Road, Cambridge CB2 1EW, UK
- Gupta, G. N. (1994). Influence of rain water harvesting and conservation practices on growth and biomass production of *Azadirachta indica* in the Indian desert. *Forest Ecology and Management* 70(1-3): 329-339. Div. Forest Ecol., Desert Dev., Arid Forest Res. Inst., 12/10 Nandanvan, Jodhpur 342 008, India
- Haubruege, E., D. Seck, et al. (1994). Growth-inhibiting effects of a neem-based insecticide (Margosan-O) against *Spodoptera littoralis* (Lepidoptera: Noctuidae). *Insect Science and its Application* 15(4-5): 415-420. {a} Fac. Sci. Agron. Gembloux, Unite Zool., Gen. Appl., B-5030 Gembloux, Belgium
- Iqbal, M. Z., M. Shafiq, et al. (1994). Effect of automobile pollution on seed weight and branch length of some plants. *Turkish Journal of Botany* 18(6): 475-479. Dep. Botany, Univ. Karachi-Pakistan
- Jacob, S. (1994). Effectiveness of some plant products for the control of pulse beetle, *Callosobruchus chinensis* on stored cowpea. *Indian Journal of Plant Protection* 22(2): 213-214. Dep. Entomol., Coll. Hortic., Kerala Agric. Univ., Vellanikkara, P.O. Trichur 680 654, Kerala, India
- Jaiswal, A. K., S. K. Bhattacharya, et al. (1994). Anxiolytic activity of *Azadirachta indica* leaf extract in rats. *Indian Journal of Experimental Biology* 32(7): 489-491. {a} Neuropharmacol. Lab., Dep. Pharmacol., Inst. Med. Sci., Banaras Hindu Univ., Varanasi 221 005, India
- Jones, I. W., A. A. Denholm, et al. (1994). Sexual development of malaria parasites is inhibited in vitro by the Neem extract azadirachtin, and its semi-synthetic analogues. *FEMS Microbiology Letters* 120(3): 267-273. {a} Mol. Cell. Parasitol. Group, Dep. Biol., Imperial Coll. Sci., Technol. Med., London, UK
- Juneja, S. C., T. Pfeifer, et al. (1994). Neem oil inhibits two-cell embryo development and trophoblast attachment and proliferation in vitro. *Journal of Assisted Reproduction and Genetics* 11(8): 419-427. {a} Lab. Mol. Embryol., Div. Mol. Genetics, Dep. Zool., Univ. Western Ontario, London, ON N6A 5B7, Canada
- Kabaleeswaran, V., S. S. Rajan, et al. (1994). Crystal and molecular structure of Azadirachtin-A. *Current Science Bangalore* 66(5): 362-364. {a} Dep. Crystallography Biophys., Univ. Madras, Guindy Campus, Madras 600 025, India
- Kant, R. and R. M. Bhatt (1994). Field evaluation of mosquito repellent action of neem oil. *Indian Journal of Malariology* 31(3): 122-125. Malaria Res. Centre, Civil Hosp., Nadiad-387 001, India
- Karmakar, P. R. and B. P. Chatterjee (1994). Isolation and characterization of two IgE-reactive proteins from *Azadirachta indica* pollen. *Molecular and Cellular Biochemistry* 131(1): 87-96. {a} Biol. Chem., Indian Association Cultivation Science, Jadavpur, Calcutta 700 032, India
- Kearney, M. L., E. J. Allan, et al. (1994). Antifeedant effects of in vitro culture extracts of the neem tree, *Azadirachta indica* against the desert locust (*Schistocerca gregaria* (Forsk.)). *Plant Cell Tissue and Organ Culture* 37(1): 67-71. {a} Dep. Agric., Univ. Aberdeen, 581 King St., Aberdeen AB9 1UD, UK

- Khan, S. M. and M. N. Siddiqui (1994). Potential of some indigenous plants as pesticides against the larvae of cabbage butterfly *Pieris brassicae* L. *Sarhad Journal of Agriculture* 10(3): 291-297. Dep. Entomol., Fac. Agric., Gomal Univ., D.I. Khan, Pakistan
- Khandalkar, H. G., U. B. Men, et al. (1994). Efficacy of some plant products against sorghum shootfly, *Atherigona soccata* Rondani. *PKV Research Journal* 18(2): 186-188. PKV, Akola, India
- Khemnark, C. (1994). Rehabilitation of degraded tropical forest land through agroforestry practices: A case study in Thailand. *Journal of Tropical Forest Science* 7(1): 128-135. Fac. Forestry, Kasetsart Univ., Thailand
- Koley, K. M. and J. Lal (1994). Pharmacological effects of *Azadirachta indica* (Neem) leaf extract on the ECG and blood pressure of rat. *Indian Journal of Physiology and Pharmacology* 38(3): 223-225. {a} Dep. Pharmacol. and Toxicol., Coll. of Vet. Sci. and A.H., Anjora, PO Dist. Durg 491 001 MP, India
- Koley, K. M., J. Lal, et al. (1994). Anti-inflammatory activity of *Azadirachta indica* (neem) leaves. *Fitoterapia* 65(6): 524-528. {a} Dep. Pharmacol. Toxicol., Coll. Vet. Sci. Anim. Husb., I.G.K.V.V., Angora, Durg, M.P., India
- Kumaran, K., M. Palani, et al. (1994). Effects of growth regulators on seed germination and seedling growth of neem (*Azadirachta indica*). *Journal of Tropical Forest Science* 6(4): 529-532. Coll. Forestry, Tamil Nadu Agricultural Univ., Coimbatore-641 003, India
- Lamers, J. P. A., K. Michels, et al. (1994). Trees and windbreaks in the Sahel: Establishment, growth, nutritive, and calorific values. *Agroforestry Systems* 26(3): 171-184. {a} Inst. Agric. Econ., Univ. Hohenheim, 70593 Stuttgart, Germany
- Ley, S. V., K. Doherty, et al. (1994). "Connectivist" approach to organic structure determination Lsd-program assisted NMR analysis of the insect antifeedant *Azadirachtin*. *Tetrahedron* 50(42): 12267-12280. {a} Lab. de Pharmacogn., Unite Associee au CNRS No. 492, Fac. de Pharm., 57 Rue Cognacq-Jay, F-51096 Reims Cedex, France
- Lowery, D. T. and M. B. Isman (1994). Insect growth regulating effects of neem extract and *azadirachtin* on aphids. *Entomologia Experimentalis et Applicata* 72(1): 77-84. {a} Dep. Plant Sci., Univ. British Columbia, Vancouver, BC V6T 1Z4, Canada
- Mehta, M. and D. N. Sen (1994). Vegetation analysis under some tree stands of semi-arid zone. *Proceedings of the National Academy of Sciences India Section B Biological Sciences* 64(2): 195-198. Lab. Plant Ecol., Dep. Bot., J. N. Vyas Univ., PO Box 14, Jodhpur 342 001, India
- Mishra, P. C., A. K. Sarkar, et al. (1994). Relative efficiency of different nitrogen sources in transplanted rice of Chotanagpur region. *Journal of the Indian Society of Soil Science* 42(2): 333-335. Dep. Soil Science Agricultural Chemistry, Birsa Agricultural Univ., Ranchi, Bihar 834 006, India
- Monzon, R. B., J. P. Alviator, et al. (1994). Larvicidal potential of five Philippine plants against *Aedes aegypti* (Linnaeus) and *Culex quinquefasciatus* (SAY). *Southeast Asian Journal of Tropical Medicine and Public Health* 25(4): 755-759. Dep. Parasitology, Coll. Public Health, Univ. Philippines Manila, Manila, Philippines
- Murugesan, K., G. Diraviam, et al. (1994). Antifungal activity of neemgold against two soil-borne plant pathogenic fungi. *Geobios Jodhpur* 21(3): 173-176. CAS in Botany, Univ. Madras, Guindy Campus, Madras 600 025, India
- Naumann, K., R. W. Currie, et al. (1994). Evaluation of the repellent effects of a neem insecticide on foraging honey bee and other pollinators. *Canadian Entomologist* 126(2): 225-230. {a} Dep. Plant Sci., Univ. British Columbia, Vancouver, B.C. V6T 1Z4, Canada
- Naumann, K., L. J. Rankin, et al. (1994). Systemic Action of Neem Seed Extract on Mountain Pine Beetle (Coleoptera: Scolytidae) in Lodgepole Pine. *Journal of Economic Entomology* 87(6): 1580-1585. {a} Phero Tech Inc., 7572 Progress Way, Delta, BC V4G 1E9, Canada
- Niber, B. T. (1994). The ability of powders and slurries from ten plant species to protect stored grain from attack by *Prostephanus truncatus* Horn (Coleoptera: Bostrichidae) and *Sitophilus oryzae* L. (Coleoptera: Curculionidae). *Journal of Stored Products Research* 30(4): 297-301. Dep. Applid Zool., Univ. Helsinki, P.O. Box 27, 00014 Helsinki, Finland
- Ogunwolu, O. and O. Idowu (1994). Potential of powdered *Zanthoxylum zanthoxyloides* (Rutaceae) root bark and *Azadirachta indica* (Meliaceae) seed for control of the cowpea seed bruchid, *Callosobruchus maculatus* (Bruchidae) in Nigeria. *Journal of African Zoology* 108(6): 521-528. Dep. Crop Product., Univ. Agric., P. M. B. 2373, Makurdi, Nigeria
- Pal, M., A. Kumar, et al. (1994). Cheap non-auxinic chemicals for rooting nodal segments of NEEM (*Azadirachta indica*). *Indian Forester* 120(2): 138-141. Plant Physiol. Discipline, Forest Res. Inst., Dehra Dun, India
- Parshad, O., P. Singh, et al. (1994). Effect of aqueous neem (*Azadirachta indica*) extract on testosterone and other blood constituents in male rats: A pilot study. *West Indian Medical Journal* 43(3): 71-74. Dep. Physiol., U.W.I., Jamaica
- Patel, T. K. and J. D. Patel (1994). Biochemical and calorific aspects of hardwood. *Indian Botanical Contactor* 11(1-4): 1-98. Dep. Biosci., Sardar Patel Univ., Vallabh Vidyanagar 388 120, India

- Puri, S., S. Singh, et al. (1994). Evaluation of fuelwood quality of indigenous and exotic trees species of India's semiarid region. *Agroforestry Systems* 26(2): 123-130. Dep. Forestry, Haryana Agric. Univ., Hisar 125 004, India
- Raguraman, S. and R. C. Saxena (1994). Effects of neem seed derivatives on brown planthopper symbiotes. *Phytoparasitica* 22(4): 299-307. {a} Tamil Nadu Agric. Univ., Coimbatore 641003, India
- Ramachandramurty, B. and R. Boopathy (1994). An underexploited source of smaller alpha-peptides. *Bioresource Technology* 48(3): 269-272. {a} Dep. Bio-Technol., Bharathiar Univ., Coimbatore 641 046, India
- Ramshe, D. G., T. B. Tambe, et al. (1994). Effect of planting geometry and trees on Bombay aloe (*Agave cantala*). *Indian Journal of Agronomy* 39(2): 342-344. Dep. Agronomy, Mahatma Phule Krishi Vidyapeeth, Rahuri, Maharashtra 413 722, India
- Rao, M. S., R. P. Tewari, et al. (1994). Integrated management of mushroom nematode (*Aphelenchoides composticola*). *Indian Journal of Agricultural Sciences* 64(12): 878-881. {a} Div. Entomol. Nematol., Indian Inst. Hortic. Research, Bangalore, Karnataka 560 089, India
- Rao, M. S. R. M., M. Padmaiah, et al. (1994). Productive utilisation of non-arable lands through watershed management in the semi-arid regions of south India. *Indian Forester* 120(1): 48-57. Central Soil Water Conservation Research Training Inst., Reserach Centre, Bellary, Karnataka, India
- Rathore, B. S. (1994). The effect of neem, mustard and karanj cakes against reniform nematode, *Rotylenchulus reniformis* on cowpea. *Indian Journal of Mycology and Plant Pathology* 24(1): 51-52. Dep. Nematol., Rajasthan Coll. Agric., Udaipur 313 001, India
- Salawu, M. B., S. K. Adedeji, et al. (1994). Performance of broilers and rabbits given diets containing full fat neem (*Azadirachta indica*) seed meal. *Animal Production* 58(2): 285-289. {a} Mackies Dairy Farm, Rothienorman, Inverurie, Aberdeenshire AB51 8US, UK
- Shankarrao, C., P. Elliah, et al. (1994). Effect of methanolic extracts of plants on aflatoxin production. *Indian Journal of Natural Products* 10(2): 13-15. {a} Dep. Pharmaceutical Sciences, Andhra Univ., Visakahpatnam 530 003, India
- Sharma, V. P. and M. A. Ansari (1994). Personal protection from mosquitoes (Diptera: Culicidae) by burning neem oil in kerosene. *Journal of Medical Entomology* 31(3): 505-507. *Malaria Res. Cent.*, 22-Sham Nath Marg, Delhi-110054, India
- Singh, A. and D. K. Singh (1994). Pestoban, a potent herbal molluscicide. *Biological Agriculture and Horticulture* 10(3): 175-178. Dep. Zool., Univ. Gorakhpur, Gorakhpur 273 009, India
- Sinniah, B., D. Sinniah, et al. (1994). Effect of neem oil and mosquito larvae. *Mosquito Borne Diseases Bulletin* 11(3): 90-93. {a} Dep. Parasitol., Fac. Med., Univ. Malaya, Kuala Lumpur, Malaysia
- Smart, L. E., M. M. Blight, et al. (1994). Development of field strategies incorporating semiochemicals for the control of the pea and bean weevil, *Sitona lineatus* L. *Crop Protection* 13(2): 127-135. {a} AFRC Inst. Arable Crops Res., Rothamsted Exp. Stn., Harpenden, Herts. AL5 2JQ, UK
- Telan, I. F., T. H. Xuan, et al. (1994). Effects of botanical treatments on brown planthopper *Nilaparvata lugens* (Stal). *International Rice Research Notes* 19(2): 28. Crop Prot. Div., Philippine Rice Res. Inst., Maligaya, Munoz, Nueva Ecija, Philippines
- Thiagarajan, M. and P. M. Murali (1994). Optimum conditions for embryo culture of *Azadirachta indica* (A. Juss). *Indian Forester* 120(6): 500-503. {a} Centre Biotechnol., Dalmia Found., Madurai, India
- Tiwari, R. J. and A. K. Barholia (1994). Effect of different levels of soil:sand:compost ratios on emergence rate index, relative root and shoot length on some fruit and forest species. *Crop Research Hisar* 8(1): 77-79. R. A. K. Coll., Agric., Sehore, India
- Vats, R. and S. N. Nandal (1994). Efficacy of differently prepared leaf extracts of Eucalyptus and neem as bare-root-dip treatment of tomato seedlings against. *Crop Research Hisar* 7(1): 125-128. Dep. Nematology, CCS Haryana Agricultural Univ., Hisar 125 004, India
- Venugopal, P. V. and T. V. Venugopal (1994). Antidermatophytic activity of Neem (*Azadirachta indica*) leaves in vitro. *Indian Journal of Pharmacology* 26(2): 141-143. {a} "Malar Mangai", A2 1st Ave., Ashok Nagar, Madras 600 083, India
- Verma, A. K., N. Agarwal, et al. (1994). In vitro degradation of wheat straw treated with neem (*Azadirachta indica*) seed kernel cake water extract. *Bioresource Technology* 50(2): 181-182. {a} Anim. Nutrition Div., Indian Vet. Res. Inst., Izatnagar-241 123, India
- Akhtar, M. and I. Mahmood (1993). Utilization of fallen leaves as soil amendments for the control of plant-parasitic nematodes. *Pakistan Journal of Nematology* 11(2): 131-138. Agric. Centre, Dep. Bot., Aligarh Muslim University, Aligarh 202002, India
- Ali, M. A. (1993). Effects of cultural practices on reducing field infestation of potato tuber moth (*Phthorimaea operculella*) and

- greening of tubers in the Sudan. *Journal of Agricultural Science* 121(2): 187-192. Dep. Hortic., Fac. Agric., Univ. Khartoum, Shambat, Sudan
- Appendino, G., S. Tagliapietra, et al. (1993). Terpenoids from *Artemisia vallesiaca*. *Fitoterapia* 64(3): 286-287. {a} Dipartimento di Scienza Tecnologia del Farmaco, Via Giuria 9, 10125 Torino, Italy
- Baitha, A., S. F. Hameed, et al. (1993). Effectiveness of neem (*Azadirachta indica* A. Juss) products against rice hispa, *Diadlosa armigera* Oliv. and *Hieroglyphus nigrorepletus* Bol. *Journal of Entomological Research New Delhi* 17(2): 149-152. Dep. Entomology, Rajendra Agricultural University, Bihar, Pusa, Samastipur-848125, India
- Balasubramanian, C., P. S. Mohan, et al. (1993). Flavanoid from resin glands of *Azadirachta indica*. *Phytochemistry Oxford* 34(4): 1194-1195. {a} Dep. Chem., Bharathiar univ., Coimbatore 641046, T.N., India
- Bartlet, E., M. M. Blight, et al. (1993). The responses of the cabbage seed weevil (*Ceutorhynchus assimilis*) to the odour of oilseed rape (*Brassica napus*) and to some volatile isothiocyanates. *Entomologia Experimentalis et Applicata* 68(3): 295-302. AFRC Inst. Arable Crop Res., Rothamsted Experimental Station, Harpenden, Herts AL5 2JQ, UK
- Baumgartner, A., M. Grand, et al. (1993). Quantitative analysis of *Escherichia coli* in water: Comparison of ECD-agar and petrifilm TM. *Mitteilungen aus dem Gebiete der Lebensmitteluntersuchung und Hygiene* 84(3): 382-387. {a} Bundesamt Gesundheitswesen, Abt. Lebensmittelwissenschaft, Sekt. Mikrobiologie, Postfach CH-3000 Bern 14, Swt
- Bisht, R. P. and O. P. Toky (1993). Growth pattern and architectural analysis of nine important multipurpose trees in an arid region of India. *Canadian Journal of Forest Research* 23(4): 722-730. {a} Dep. Forestry, Haryana Agric. Univ., Hisar 125 004, India
- Burnell, R. H., C. Cote, et al. (1993). Approaches to the synthesis of aromatic diterpenes oxygenated in ring A: Synthesis of margocilin O-methyl ether. *Journal of Natural Products Lloydia* 56(4): 461-472. Dep. Chimie, Univ. Laval, Quebec G1K 7P4, Canada
- Burnell, R. H., N. Dumont, et al. (1993). Synthesis of O-methyl nimbinone. *Journal of Natural Products Lloydia* 56(11): 1930-1936. Dep. Chimie, Univ. Laval, PQ G1K 7P4, Canada
- Chattopadhyay, R. N., S. K. Maitra, et al. (1993). Possible mechanism of antihyperglycemic effect of *Azadirachta indica* leaf extract: Part I. *Fitoterapia* 64(4): 332-335. {a} Dep. Pharmacol., Sch. Tropical Med., Calcutta, India
- Chattopadhyay, R. R., R. N. Chattopadhyay, et al. (1993). Possible mechanism of antihyperglycemic effect of *Azadirachta indica* leaf extract: Part III. *Fitoterapia* 64(6): 535-538. Biometry Res. Unit, Indian Statistical Inst., 203 Barrackpore Trunk Rd., Calcutta 700 035, India
- Chattopadhyay, R. R., R. N. Chattopadhyay, et al. (1993). Possible mechanism of antiinflammatory activity of *Azadirachta indica* leaf extract. *Indian Journal of Pharmacology* 25(2): 99-100. {a} Biometry Res. Unit, Indian Stat. Inst., 203 Barrackpore Trunk Rd., Calcutta 700 035, India
- Chinnasamy, N., N. Harishankar, et al. (1993). Toxicological studies on debitterized neem oil (*Azadirachta indica*). *Food and Chemical Toxicology* 31(4): 297-301. {a} Natl. Inst. Nutr., Indian Council Med. Res., Jamai-Osmania, Hyderabad 500 007, A.P., India
- Claparols, I., M. A. Santos, et al. (1993). Influence of some exogenous amino acids on the production of maize embryogenic callus and on endogenous amino acid content. *Plant Cell Tissue and Organ Culture* 34(1): 1-11. {a} Lab. Plant Tissue Culture, Dep. d'Agrobiologia, Centre d'Investigacion Desenvolupament Barcelona, C.S.I.C. Jordi Girona 18-26, Barcelona, Spain
- Coffelt, M. A. and P. B. Schultz (1993). Relationship among orange-striped oakworm (*Lepidoptera: Saturniidae*) frass length, frass production, host plant, and defoliation. *Journal of Entomological Science* 28(3): 291-298. Dep. Entomol., Va. Polytechnic Inst. and State Univ., Hampton Roads Agric. Experiment Station, Virginia Beach, VA 23455, USA
- Dimetry, N. Z., S. A. A. Amer, et al. (1993). Biological activity of two neem seed kernel extracts against the two-spotted spider mite *Tetranychus urticae* Koch. *Journal of Applied Entomology* 116(3): 308-312. {a} Dep. Pests Plant Protection, Natl. Res. Centre, Tahrir St., Dokki, Cairo, Egypt
- Durairaj, C. and M. S. Venugopal (1993). Effects of neem and nochi on rice bug *Leptocorisa acuta*. *International Rice Research Notes* 18(3): 34. {a} Natl. Pulses Res. Centre, Vamban Pudukkottai 622303, India
- Dyke, G. V. and B. A. Stewart (1993). Factors affecting the grain yield, milling and breadmaking quality of wheat, 1969-1972: I. Grain yield, milling quality and flour protein content in relation to variety and nitrogen fertilizer. *Plant Varieties and Seeds* 6(2): 115-128. {a} Applied Statistics Res. Unit, Univ. Kent, Canterbury, Kent CT2 7NF, UK
- Eppler, A. (1993). Studies on the inhibitory effect of neem on bacteria. *Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent* 58(3a): 1145-1153. Inst. Phytopathol. Angewandte Zool., Justus-Liebig-Univ., Ludwigstr. 23, 6300 Giessen, Germany

- Eppler, A. (1993). Studies on the inhibitory effect of neem on viral infections of plants: II. Seeds. Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent 58(3a): 1135-1144. Inst. Phytopathol. Angewandte Zool., Justus-Liebig-Univ., Ludwigr. 23, 6300 Giessen, Germany
- French, N. M. I., P. Follett, et al. (1993). Colonization of potato fields in eastern North Carolina by Colorado potato beetle. Entomologia Experimentalis et Applicata 68(3): 247-256. Dep. Entomol., N.C. State Univ., Raleigh, NC 27695, USA
- Garg, S., V. Taluja, et al. (1993). Studies on the contraceptive efficacy of Praneem polyherbal cream. Contraception 48(6): 591-596. {a} Natl. Inst. Immunol., Aruna Asaf Road, New Delhi-110 067, India
- Gautam, V. K., K. Nanda, et al. (1993). Development of shoots and roots in anther-derived callus of *Azadirachta indica* A. Juss., A medicinal tree. Plant Cell Tissue and Organ Culture 34(1): 13-18. {a} Dep. Botany, Univ. Delhi, Delhi-11007, India
- Goldhill, J., J. Hardcastle, et al. (1993). Local and systemic actions of loperamide on fluid transport and transmural potential difference across rat small intestine. Journal of Pharmacy and Pharmacology 45(3): 210-214. {a} Dep. Biomed. Sci., Univ., Sheffield S10 2TN, UK
- Goswami, B. K. and T. P. Devi (1993). Comparative efficacy of neem and mahua oilseed cakes and a clay dust "ABCD" against root-knot nematode infecting pea. Indian Journal of Plant Protection 21(2): 245-246. Div. Nematol., Indian Agric. Res. Inst., New Delhi 110 012, India
- Gupta, G. N., K. R. Choudhary, et al. (1993). Neem establishment in arid zone as influenced by different techniques of rain water harvesting. Indian Forester 119(11): 914-919. Arid Forest Res. Inst., Jodhpur, Rajasthan, India
- Habte, M., B. N. Muruleedhara, et al. (1993). Response of neem (*Azadirachta indica*) to soil P concentration and mycorrhizal colonization. Arid Soil Research and Rehabilitation 7(4): 327-333. {a} Dep. Agronomy and Soil Sci., 1910 East-West Rd., Univ. Hawaii, Honolulu, HI 96822, USA
- Ivbijaro, M. F., V. C. Umeh, et al. (1993). Laboratory toxicity of the crude extracts of *Piper guineense* Schum and Thonn, *Azadirachta indica* A. Juss and *Parkia clappertoniana* (JACQ) to the termites *Macrotermes nigeriensis* (Sjostedt) (Isoptera: Termitidae). Insect Science and its Application 14(2): 229-233. {a} Dep. Agric. Biol., Univ. Ibadan, Ibadan, Nigeria
- Jagannadh, V. and V. S. K. Nair (1993). Effects of azadirachtin and a juvenile hormone analogue on neck-ligated post-feeding larvae of *Spodoptera mauritia* Bois. Indian Journal of Experimental Biology 31(2): 199-200. {a} Dep. Zoology, University Calicut, Kerala 673 635, India
- Jain, P. and T. R. Sahu (1993). An ethnobotanical study of Noradehi Sanctuary Park of Madhya Pradesh, India: Native plant remedies for scorpion sting and snake bite. Journal of Economic and Taxonomic Botany 17(2): 315-328. Dep. Botany, Dr. Hari Singh Gour Univ., Sagar-470 003, India
- Jood, S., A. C. Kapoor, et al. (1993). Evaluation of some plant products against *Trogoderma granarium* everts in stored maize and their effects on nutritional composition and organoleptic characteristics of kernels. Journal of Agricultural and Food Chemistry 41(10): 1644-1648. {a} Dep. Foods Nutrition, CCS Haryana Agric. Univ., Hisar 125 004, India
- Jood, S., A. C. Kapoor, et al. (1993). Evaluation of some plant products against *Trogoderma granarium* Everts in stored wheat and their effects on nutritional composition and organoleptic characteristics of treated grains. International Journal of Pest Management 39(1): 93-98. {a} Dep. Foods and Nutrition, Haryana Agric. Univ., Hisar-125004, India
- Joseph, P. A. and R. Prasad (1993). The effect of dicyandiamide and neem cake on the nitrification of urea-derived ammonium under field conditions. Biology and Fertility of Soils 15(2): 149-152. Div. Agronomy, Indian Agric. Res. Inst., New Delhi-110012, India
- Karimullah, S. A. and M. A. Mashwani (1993). Relative abundance of insect pests on maize cultivars at Kalam. Sarhad Journal of Agriculture 9(1): 15-19. {a} Dep. Entomol., NWFP Agric. University, Peshawar
- Karunaichamy, K. S. T. K., K. Paliwal, et al. (1993). Diurnal course of leaf gas exchange of mistletoe (*Dendrophthoe falcata*) and its host (*Azadirachta indica*) in a semi-arid region of Southern India. Proceedings of the Indian National Science Academy Part B Biological Sciences 59(5): 505-510. {a} Dep. Plant Sci., Sch. Biological Sciences, Madurai Kamaraj University, Madurai 625 021, India
- Katiyar, R. C., V. R. B. Sastry, et al. (1993). Nutrient utilization from alkali detoxified neem (*Azadirachta indica*) seed kernel cake by cattle and buffalo. Indian Journal of Animal Nutrition 10(4): 223-226. Div. Animal Nutrition, Indian Veterinary Res. Inst., Izatnagar 243 122, India
- Kreis, P. and A. Mosandl (1993). Chiral compounds of essential oils: Part XIII. Simultaneous chirality evaluation of geranium oil constituents. Flavour and Fragrance Journal 8(3): 161-168. Inst. Lebensmittelchem., Johann Wolfgang Goethe-Univ., Robert-Mayer-Strasse 7-9, D-6000 Frankfurt/Main 11, Germany
- Kumar, A., V. K. Sharma, et al. (1993). Efficacy of some indigenous drugs in tissue repair in buffaloes. Indian Veterinary Journal



70(1): 42-44. {a} Anim. Husbandry Dep., College Veterinary Sci., G. B. Pant Univ. Agric. Technology, Pantnagar-263 145, U.P

Ley, S. V., P. J. Lovell, et al. (1993). Chemistry of insect antifeedants from *Azadirachta indica* (Part 15): Degradation studies of azadirachtin leading to C8-C14 bond cleavage. *Tetrahedron* 49(8): 1675-1700. {a} Dep. Chem., Imperial College of Sci. Technology and Medicine, London SW7 2AY, UK

Lowery, D. T. and M. B. Isman (1993). Antifeedant activity of extracts from neem, *Azadirachta indica*, to strawberry aphid, *Chaetosiphon fragaefolii*. *Journal of Chemical Ecology* 19(8): 1761-1773. {a} Dep. Plant Sci., Univ. B.C., Vancouver, BC V6T 1Z4, Canada

McFaul, P. B., D. J. Taylor, et al. (1993). The assessment of clinical competence in obstetrics and gynaecology in two medical schools by an objective structured clinical examination. *British Journal of Obstetrics and Gynaecology* 100(9): 842-846. {a} Dep. Obstetrics Gynaecol., Queen's University Belfast, Inst. Clinical Sci., Grosvenor Rd., Belfast BT12 6BJ, Northern Ireland

Meng, F. R. and P. A. Arp (1993). Net photosynthesis and stomatal conductance of red spruce twigs before and after twig detachment. *Canadian Journal of Forest Research* 23(4): 716-721. {a} Dep. Forest Resources, Fac. Forestry, Univ. New Brunswick, Fredericton, NB E3B 6C2, Canada

Meyer, E., B. J. De, et al. (1993). Skin, adipose tissue and plasma levels of acitretin with rare occurrence of esterified acitretin during long-term treatment. *Acta Dermato Venereologica* 73(2): 113-115. Lab. Med. Biochem., voor Klin. Analyse, Univ. Gent, Harelbekestraat 72, B-9000 Gent, Belgium

Miranpuri, G. S., M. J. Bidochka, et al. (1993). Control of painted lady caterpillars, *Vanessa cardui* L. (Lep., Nymphalidae), on borage by *Bacillus thuringiensis* var. *kurstaki*. *Journal of Applied Entomology* 116(2): 156-162. {a} Bioinsecticide Res. Lab., Dep. Appl. Microbiol. Food Sci., Univ. Sask., Saskatoon, Saskatchewan S7N 0W0, Canada

Mohiuddin, S., R. A. Qureshi, et al. (1993). Laboratory evaluation of some vegetable oils as protectants of stored products. *Pakistan Journal of Scientific and Industrial Research* 36(9): 377-379. PCSIR Lab. Complex, Karachi-75280, Pakistan

Moline, H. E. and J. C. Locke (1993). Comparing neem seed oil with calcium chloride and fungicides for controlling postharvest apple decay. *Hortscience* 28(7): 719-720. {a} Horticultural Crops Quality Lab., Beltsville Agric. Res. Cent., Agric. Res. Service, U.S. Dep. Agric., Beltsville, MD 20705

Mordue, A. J. and A. Blackwell (1993). Azadirachtin: An update. *Journal of Insect Physiology* 39(11): 903-924. {a} Dep. Zool., Univ. Aberdeen, Tillydrone Ave., Aberdeen AB9 2TN, UK

Nasiri, A., A. Holth, et al. (1993). Effects of the sesquiterpene capsidiol on isolated guinea-pig ileum and trachea, and on prostaglandin synthesis in vitro. *Planta Medica* 59(3): 203-206. {a} Dep. Pharmacognosy, Biomedical Centre, Uppsala Univ., P.O.B. 579, S-751 23 Uppsala, Sweden

Nasiruddin, M. and A. J. Mordue (1993). The effect of azadirachtin on the midgut histology of the locusts, *Schistocerca gregaria* and *Locusta migratoria*. *Tissue and Cell* 25(6): 875-884. {a} Dep. Zool., Univ. Aberdeen, Aberdeen AB9 2TN, UK

Nasseh, O., H. Wilps, et al. (1993). Neem products: Effective biopesticides for combatting the desert locust, *Schistocerca gregaria* (Forsk.). *Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz* 100(6): 611-621. {a} Deutsche Gesellschaft fuer Technische Zusammenarbeit (GTZ) GmbH, D-65726 Eschborn, Germany

Nicol, C. M. Y. (1993). Phagodeterrency of neem products and their effects after oral intake on the Desert Locust, *Schistocerca gregaria*. *Mededelingen Faculteit Landbouwkundige en Toegepaste Biologische Wetenschappen Universiteit Gent* 58(2b): 583-591. Inst. fuer Phytopathol. Angewandte Zool., Justus-Liebig-Universitaet, Ludwigstr. 23, 35390 Giessen, Germany

Nivsarkar, M., G. P. Kumar, et al. (1993). Effect of ultraviolet activated alfa-terthienyl upon anal gill membrane of mosquito larvae: A spin label study. *Biochemical Systematics and Ecology* 21(4): 441-447. {a} Sch. Life Sci., Devi Ahilya Vishwavidyalaya, Vighyan Bhawan, Khandwa Rd., Indore-452 001, M.P., India

Nok, A. J., K. A. N. Esievo, et al. (1993). Trypanocidal potentials of *Azadirachta indica*: In vivo activity of leaf extract against *Trypanosoma brucei brucei*. *Journal of Clinical Biochemistry and Nutrition* 15(2): 113-118. {a} Dep. Biochem., Ahmadu Bello Univ., Zaria, Nigeria

Osuala, F. O. U. and V. N. Okwuosa (1993). Toxicity of *Azadirachta indica* to freshwater snails and fish, with reference to the physicochemical factor effect on potency. *Applied Parasitology* 34(1): 63-68. {a} Dep. Zool., Univ. Jos, Private Mail Bag 2084, Jos, Plateau State, Nigeria

Patel, J. R., C. C. Patel, et al. (1993). Bioefficacy of some plant products against mustard saw fly, armyworm and diamond back moth. *Indian Journal of Plant Protection* 21(2): 240-241. Dep. Entomol., B.A. Coll. Agric., Gujarat Agric. Univ., Anand Campus, Anand 388 110, Gujarat, India

Perez, G. R. M., G. S. Perez, et al. (1993). Anti-inflammatory activity of *Cissus trifoliata*. *Fitoterapia* 64(2): 103-107. {a} Escuela Superior Ingenieria Quim. e Industrias Extractivas I.P.N. Punto Fijo 16, Col. Torres de Lindavista, C.P. 07050 Mexico, DF

## Mexico

Prijono, D. and E. Hassan (1993). Correction of BA 96122334. Laboratory and field efficacy of neem (*Azadirachta indica* A. Juss) extracts against two broccoli pests. Correction of abstract. Erratum published in Z PFLANZENKR PFLANZENSCHUTZ Vol. 101. Iss. 3. 1994. p. 336. Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz 100(4): 355-370. {a} Dep. Plant Pests Dis., Fac. Agric., Bogor Agric. Univ., Bogor 16144, Indonesia

Prijono, D. and E. Hassan (1993). Laboratory and field efficacy of neem (*Azadirachta indica* A. Juss) extracts against two broccoli pests. Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz 100(4): 355-370. {a} Dep. Plant Pests Diseases, Fac. Agric., Bogor Agric. Univ., Bogor 16144, Indonesia

Rao, M. V., S. Khujneri, et al. (1993). Response of eight tropical plants to enhanced ammonia deposition under field conditions prevalent with SO<sub>2</sub> and NH<sub>3</sub>. Water Air and Soil Pollution 71(3-4): 331-345. {a} Dep. Hortic. Sci., Univ. Guelph, Guelph, ON N1G 2W1, Canada

Richardson, M. D. and C. W. Bacon (1993). Cyclic hydroxamic acid accumulation in corn seedlings exposed to reduced water potentials before, during, and after germination. Journal of Chemical Ecology 19(8): 1613-1624. {a} USDA, ARS, Toxicol. Mycotoxin Res. Unit, R.B. Russell Agric. Res. Cent., P.O. Box 5677, Athens, GA 30613, USA

Rojatkar, S. R. and B. A. Nagasampagi (1993). 1-Tigloyl-3-acetyl-11-hydroxy-4-beta-methylmelicarpin from *Azadirachta indica*. Phytochemistry Oxford 32(1): 213-214. {a} National Chemical Lab., Pune 411 008, India

Russell, W. R., P. J. McLeod, et al. (1993). Acephate as a potential management tool of *Helicoverpa zea* (Lepidoptera: Noctuidae) in snap bean. Journal of Economic Entomology 86(3): 860-863. {a} Dep. Entomol., Univ. Arkansas, Fayetteville, AR 72701, USA

Schmutterer, H., M. Baumgart, et al. (1993). The effects of neem oil and other neem products on nymphs and resulting adults of *Schistocerca gregaria*, *Nomadacris septemfasciata*, *Locusta migratoria migratorioides*, and *Zonocercus variegatus*. Journal of Applied Entomology 116(2): 178-186. {a} Inst. fuer Phytopathol. und Angewandte Zool., Ludwigstr. 23, D-35390 Giessen, Germany

Schmutterer, H. and M. Doll (1993). The marrango or Philippine neem tree, *Azadirachta excelsa* (equals *Azadirachta integrifoliola*): A new source of insecticides with growth-regulating properties. Phytoparasitica 21(1): 79-86. {a} Inst. Phytopathologie und Angewandte Zoologie, Justus-Liebig-Univ., D-6300 Giessen, Germany

Shaikh, P. D., B. Manivannan, et al. (1993). Antispermatic activity of *Azadirachta indica* leaves in albino rats. Current Science Bangalore 64(9): 688-689. {a} Dep. Zool., Karnatak Sci. Coll., Dharward 580 001, India

Sharma, V. P., M. A. Ansari, et al. (1993). Mosquito repellent action of neem (*Azadirachta indica*) oil. Journal of the American Mosquito Control Association 9(3): 359-360. Malaria Res. Cent., 22 Sham Nath Marg, Delhi 110 054, India

Shrikhande, M., S. R. Thengane, et al. (1993). Somatic embryogenesis and plant regeneration in *Azadirachta indica* A. Juss. In Vitro Cellular and Developmental Biology Plant 29P(1): 38-42. {a} Div. Plant Tissue Culture, Natl. Chem. Lab., Pune-411 008, India

Singh, G. and R. K. Upadhyay (1993). Essential oils: A potent source of natural pesticides. Journal of Scientific and Industrial Research India 52(10): 676-683. Dep. Chem., Univ. Gorakhpur, Gorakhpur 273 009, India

Singh, H. N. P., M. M. Prasad, et al. (1993). Efficacy of leaf extracts of some medicinal plants against disease development in banana. Letters in Applied Microbiology 17(6): 269-271. Univ. Dep. Botany, Bhagalpur Univ., Bhagalpur-812 007, India

Stefani, M. A. A., I. Muller, et al. (1993). Leishmania major infection in BALB/c mice: Protection or exacerbation by treatment with different doses of BCG. Research in Immunology 144(4): 233-243. {a} WHO Immunol. Res. and Training Cent., Inst. Biochem., Univ. Lausanne, 155 Chemin des Boveresses, 1066 Epalinges, Switzerland

Sundaram, K. M. S. and J. Curry (1993). High performance liquid chromatographic method for the analysis of azadirachtin in two commercial formulations and neem oil. Journal of Environmental Science and Health Part B Pesticides Food Contaminants and Agricultural Wastes 28(2): 221-241. Forestry Canada, Forest Pest Management Inst., P.O. Box 490, 1219 Queen St. East, Sault Ste. Marie, ON P6A 5M7, Canada

Thomas, A. A. and P. K. Hiradhar (1993). Neem induced non-reversible sterility on the red cotton bug, *Dysdercus cingulatus* Fabr. (Heteroptera: Pyrrhocoridae). Journal of Animal Morphology and Physiology 40(1-2): 87-94. {a} Dep. Bio-Sciences, South Gujarat Univ., Surat 395 007, India

Tilander, Y. (1993). Effects of mulching with *Azadirachta indica* and *Albizia lebbeck* leaves on the yield of sorghum under semi-arid conditions in Burkina Faso. Agroforestry Systems 24(3): 277-293. Swedish Univ. Agric. Sci., Dep. Ecol. Environmental Res., PO Box 7072, S-750 07 Uppsala, Sweden

Toky, O. P. and R. P. Bisht (1993). Above-ground and below-ground biomass allocation in important fuelwood trees from arid

north-western India. *Journal of Arid Environments* 25(3): 315-320. For. Dep., Haryana Agric. Univ., Hisar 125 004, India

Totey, N. G., A. Prasad, et al. (1993). Cation exchange capacity of roots of forest tree species. *Journal of the Indian Society of Soil Science* 41(1): 158-160. Tropical Forest Res. Inst., RFRC Post Office, Jabalpur, Madhya Pradesh 482 021, India

Upadhyay, S. N., S. Dhawan, et al. (1993). Antifertility effects of neem (*Azadirachta indica*) oil in male rats by single intra-vas administration: An alternate approach to vasectomy. *Journal of Andrology* 14(4): 275-281. {a} Natl. Inst. Immunol., Shahid Jeet Singh Marg, New Delhi-110067, India

Verma, R. R., R. Joshi, et al. (1993). Control of mushroom nematode, *Aphelenchoides composticola*. *Indian Journal of Nematology* 23(1): 134-135. Horticultural Exp. Training Cent., Chaubattia, UP, India

Williams, L. A. D. (1993). Adverse effects of extracts of *Artocarpus altilis* Park. and *Azadirachta indica* (A. Juss) on the reproductive physiology of the adult female tick, *Boophilus microplus* (Canest.). *Invertebrate Reproduction and Development* 23(2-3): 159-164. Sci. Res. Council, P.O. Box 350, Kingston 6, Jamaica

Williams, L. A. D. and A. Mansingh (1993). Pesticidal potentials of tropical plants-I. Insecticidal activity in leaf extracts of sixty plants. *Insect Science and its Application* 14(5-6): 697-700. {a} Dep. Zoology, P.O. Box 12, Univ. West Indies, Kingston 7, Jamaica

Zhou, Z., M. Zhou, et al. (1993). Evaluation of 90:10 poly(DL-lactide-coglycolide) microspheres containing norethisterone: Drug release and biodegradation. *Biomaterials Artificial Cells and Immobilization Biotechnology* 21(4): 475-486. Inst. Family Planning, Zhejiang Acad. Med. Sciences, Hangzhou, China 310013

Ahmed, S. M. and A. Ahamad (1992). Efficacy of some indigenous plants as pulse protectants against *Callosobruchus chinensis* (L) infestation. *International Pest Control* 34(2): 54-56.

Anwar, T., A. Jabbar, et al. (1992). Plants with insecticidal activities against four major insect pests in Pakistan. *Tropical Pest Management* 38(4): 431-437. {a} National Agric. Research Centre, Islamabad, Pakistan

Ara, I., B. S. Siddiqui, et al. (1992). Isolation and structure elucidation of the triterpene azadirinin from the root of *Azadirachta indica*. *Fitoterapia* 63(2): 118-121.

Banik, S. and S. Chanda (1992). Airborne pollen survey of Central Calcutta, India, in relation to allergy. *Grana* 31(1): 72-75.

Banu, M. J., K. Nellaiappan, et al. (1992). Mitochondrial malate dehydrogenase and malic enzyme of a filarial worm *Setaria digitata*: Some properties and effects of drugs and herbal extracts. *Japanese Journal of Medical Science and Biology* 45(3): 137-150. {a} National Inst. Leprosy Research, 42-1 Aobacho, Higashimurayamashi, Tokyo 189, Japan

Bhanot, R. K. and G. P. Bhawane (1992). Impact of different plant extractives on the digestive carbohydrases of the adult *Leucopholis lepidophora* Bl. (Coleoptera: Scarabaeidae). *Journal of Advanced Zoology* 13(1-2): 19-24. {a} Dep. Zool., Shivaji Univ., Kolhapur-416 004, India

Charles, V. and S. X. Charles (1992). The use and efficacy of *Azadirachta indica* ADR ("Neem") and *Curcuma longa* ("Turmeric") in scabies: A pilot study. *Tropical and Geographical Medicine* 44(1-2): 178-181. {a} 'THAYAGAM' 172, K.P. Road, Nagercoil-629 001, S. India

Chaudhry, M. I. and G. A. Bajwa (1992). Efficacy of botanical pesticides against *Plecoptera reflexa* Guen. (Noctuidae, Lepidoptera), Shisham defoliator. *Pakistan Journal of Forestry* 42(2): 199-202. Pakistan Forest Inst., Peshawar, Pakistan

Colin, J. E. and L. D. Pussemier (1992). The neem *Azadirachta indica* as a means to control soil nematodes and its application in vegetable cultures in Benin. *Tropicultura* 10(3): 89-92. {a} B.P. 08-0129, Cotonou, Benin

Dreyer, E., D. Epron, et al. (1992). Photochemical efficiency of photosystem II in rapidly dehydrating leaves of 11 temperate and tropical tree species differing in their tolerance to drought. *Annales des Sciences Forestieres Paris* 49(6): 615-625. {a} INRA-Nancy, Lab. Bioclimatologie d'Ecophysiologie Forestieres, Station Sylviculture Production, Champenoux, F-54280 Seichamps, France

Govindachari, T. R. (1992). Chemical and biological investigations on *Azadirachta indica* (the neem tree). *Current Science Bangalore* 63(3): 117-122. Centre Agrochem. Res., SPIC Sci. Found., 110 Mount Rd., Guindy, Madras 600 032, India

Govindachari, T. R., G. Sandhya, et al. (1992). Structure of azadirachtin K, a new tetranortriterpenoid from *Azadirachta indica*. *Indian Journal Of Chemistry Section B Organic Chemistry Including Medicinal Chemistry* 31(6): 295-298.

Govindachari, T. R., G. Sandhya, et al. (1992). Azadirachtins H and I: Two new tetranortriterpenoids from *Azadirachta indica*. *Journal Of Natural Products* 55(5): 596-601.

Grace, J. K. and J. R. Yates (1992). Behavioural effects of a neem insecticide on *Coptotermes formosanus* (Isoptera: Rhinotermitidae). *Tropical Pest Management* 38(2): 176-180.

- Ibrahim, I. A., S. A. Khalid, et al. (1992). On the toxicology of *Azadirachta indica* leaves. *Journal Of Ethnopharmacology* 35(3): 267-273.
- Ishida, M., M. Serit, et al. (1992). Several antifeedants from neem oil, *Azadirachta indica* A. Juss., against *Reticulitermes speratus* Kolbe (Isoptera: Rhinotermitidae). *Bioscience Biotechnology and Biochemistry* 56(11): 1835-1838. {a} Pestic. Res. Inst., Fac. Agric., Kyoto Univ., Kyoto 606, Japan
- Jackai, L. E. N., E. E. Inang, et al. (1992). The potential for controlling post-flowering pest of cowpea, *Vigna unguiculata* Walp. using neem, *Azadirachta indica* A. Juss. *Tropical Pest Management* 38(1): 56-60.
- Janacek, J. and I. Prasil (1992). Stimulation of net photosynthetic rate of two wheat cultivars by 1 kPa oxygen during the low temperature acclimation. *Photosynthetica Prague* 26(3): 341-346. Dep. Plant Physiol., Res. Inst. Crop Production, Drnovska 507, CS-161 06 Praha, Czechoslovakia
- Kaethner, M. (1992). Fitness reduction and mortality effects of neem-based pesticides on the Colorado potato beetle *Leptinotarsa decemlineata* Say (Col., Chrysomelidae). *Journal Of Applied Entomology* 113(5): 456-465.
- Kolb, H. C., S. V. Ley, et al. (1992). Chemistry of insect antifeedants from *Azadirachta indica* (Part 13): On the use of the intramolecular Diels-Alder reaction for the construction of trans-fused hydrobenzofuran fragments for azadirachtin synthesis. *Journal of the Chemical Society Perkin Transactions I*(21): 2763-2777. Dep. Chem., Imperial Coll. Sci., Technology and Med., London, SW7 2AY, UK
- Kolb, H. C., S. V. Ley, et al. (1992). Chemistry of insect antifeedants from *Azadirachta indica* (Part 12): Use of silicon as a control element in the synthesis of a highly functionalized decalin fragment of azadirachtin. *Journal of the Chemical Society Perkin Transactions I*(21): 2735-2762. {a} Dep. Chem., Imperial Coll. Sci., Technol. Med., London SW7 2AY, UK
- Kossou, D. K. (1992). Sensitivity of woods used for the construction of traditional granaries to attack by *Prostephanus truncatus* (Horn) (Coleoptera: Bostrichidae). *Insect Science and its Application* 13(3): 435-439. Fac. Sci. Agron., Univ. Natl. Benin, B.P. 526 Cotonou, Republique du, Benin
- Kroes, B. H., D. B. A. J. J. Van, et al. (1992). Anti-inflammatory activity of gallic acid. *Planta Medica* 58(6): 499-504. {a} Res. Cent. Natural Prod. and Phytopharmaceuticals, Fac. Pharmacy, Univ. Utrecht, Sorbonnelaan 16, 3508 TB Utrecht, Netherlands Antilles
- Kumar, K. P., C. R. Reddy, et al. (1992). Utilization of water washed neem seed cake as cattle feed. *Indian Veterinary Journal* 69(2): 127-132.
- Maredia, K. M., O. L. Segura, et al. (1992). Effects of neem, *Azadirachta indica*, on six species of maize insect pests. *Tropical Pest Management* 38(2): 190-195.
- Meisner, J., M. Klein, et al. (1992). Effect of Margosan-O on the development of the leafhopper *Asymmetrasca decedens*. *Phytoparasitica* 20(1): 15-24.
- Meisner, J., M. V. Melamed, et al. (1992). Effect of Margosan-O on the growth and development of *Ostrinia nubilalis*. *International Pest Control* 34(2): 52-53.
- Mughal, M. S. (1992). Spotlight species on *Azadirachta indica* (Neem). *Pakistan Journal of Forestry* 42(2): 235-238. Pakistan Forest Inst., Peshawar, Pakistan
- Muthuchelian, K. (1992). Biomass productivity relative to net photosynthetic rate, ribulose-1,5-bisphosphate carboxylase activity, soluble protein and nitrogen contents in ten tree species. *Photosynthetica Prague* 26(3): 333-340. Sch. Energy, Environ. and Natural Resources, Madurai Kamaraj Univ., Madurai-625 021, India
- Niber, B. T., J. Helenius, et al. (1992). Toxicity of plant extracts to three storage beetle (Coleoptera). *Journal Of Applied Entomology* 113(2): 202-208.
- Omoriegbe, E. and M. A. Okpanachi (1992). Growth of *Tilapia zilli* exposed to sublethal concentrations of crude extracts of *Azadirachta indica*. *Acta Hydrobiologica* 34(3): 281-286. University of Jos, Dep. Zool., Fisheries Res. Unit, P.M.B. 2084, Jos, Nigeria
- Puri, S. and K. S. Bangarwa (1992). Effects of trees on the yield of irrigated wheat crop in semi-arid regions. *Agroforestry Systems* 20(3): 229-241. Dep. Agroforestry, Haryana Agric. Univ., Hisar 125 004, India
- Rao, D. R., R. Reuben, et al. (1992). Evaluation of neem, *Azadirachta indica* with and without water management, for the control of culicine mosquito larvae in rice-fields. *Medical and Veterinary Entomology* 6(4): 318-324. {a} Cent. Res. Med. Entomol., P.B. No. 5, Satya Sai Nagar, Madurai 625 003, India
- Rao, S. J., K. C. Chitra, et al. (1992). Antifeedant and insecticidal properties of certain plant extracts against brinjal spotted leaf beetle, *Henosepilachna vigintioctopunctata* (Fab.). *Journal of Insect Science* 5(2): 163-164. Dep. Entomol., S.V. Agric. Coll.,

Tirupati 517 502, India

Reddy, M. V. (1992). Effects of microarthropod abundance and abiotic variables on mass-loss, and concentration of nutrients during decomposition of *Azadirachta indica* leaf litter. *Tropical Ecology* 33(1): 89-96. Environ. Biol. Lab., Dep. Zool., Kakatiya Univ., Warangal-506 009, India

Riley, I. T. (1992). *Anguina tritici* is a potential vector of *Clavibacter toxicus*. *Australasian Plant Pathology* 21(4): 147-149. Plant Pathol. Branch, Dep. Agric., South Perth, Western Australia 6151

Sanguanpong, U. and H. Schmutterer (1992). Laboratory trials on the effects of neem oil and neem-seed based extracts against the two-spotted spider mites *Tetranychus urticae* Koch (Acari: Tetranychidae). *Zeitschrift fuer Pflanzenkrankheiten und Pflanzenschutz* 99(6): 637-646. Inst. Phytopathol. und Angewandte Zool., Justus-Liebig-Univ. Giessen, Ludwigstr. 23, D-6300 Giessen

Sarma, V., S. R. S. Rao, et al. (1992). Leaf architecture in relation to taxonomy: Meliaceae. *Feddes Repertorium* 103(7-8): 535-542. Sardar Patel Coll., Plant Anat. and Taxonomy Lab., Dep. Botany, Padmarao nagar, Secunderabad-500 025, India

Sen, P., P. K. Mediratta, et al. (1992). Effects of *Azadirachta indica* A Juss on some biochemical, immunological and visceral parameters in normal and stressed rats. *Indian Journal of Experimental Biology* 30(12): 1170-1175. Dep. Pharmacol., Univ. Coll. Med. Sci., Shahdara, Delhi 110 095, India

Serit, M., M. Ishida, et al. (1992). Antifeeding potency of neem (*Azadirachta indica*) extractives and limonoids against termite (*Reticulitermes speratus*). *Journal of Pesticide Science* 17(4): 267-273. {a} Central Research Lab., Taiyo Kagaku Co. Ltd., Takaramachi, Yokkaichi 510, Japan

Sharma, G. K. (1992). Growth-inhibiting activity of azadirachtin on (*Corcyra cephalonica*). *Phytoparasitica* 20(1): 47-50.

Siddiqui, B. S., Ghiasuddin, et al. (1992). Triterpenoids from the fresh fruit coats of *Azadirachta indica*. *Phytochemistry Oxford* 31(12): 4275-4278. H.E.J. Res. Inst. Chem., Univ. Karachi, Karachi 75270, Pakistan

Siddiqui, S., S. Faizi, et al. (1992). Constituents of *Azadirachta indica*: Isolation and structure elucidation of a new antibacterial tetranortriterpenoid, mahmoodin, and a new protolimonoid, naheedin. *Journal Of Natural Products* 55(3): 303-310.

Singh, R. K. and R. S. Dwivedi (1992). Fungitoxicity of oil cakes against *Sclerotium rolfsii* Sacc. causing foot-rot disease of barley. *Proceedings of the National Academy of Sciences India Section B Biological Sciences* 62(3): 481-486. Centre Advanced Study Botany, Banaras Hindu Univ., Varanasi-221 005, India

Sundararaju, R. and A. K. Chinnathurai (1992). Technology packages for reclamation and development of wastelands. *Indian Forester* 118(9): 609-615. {a} Forests Res., Coimbatore, Tamil Nadu

Swaine, M. D., W. D. Hawthorne, et al. (1992). The effects of fire exclusion on savanna vegetation at Kpong, Ghana. *Biotropica* 24(2 Part A): 166-172.

Vohora, S. B. and P. C. Dandiya (1992). Herbal analgesic drugs. *Fitoterapia* 63(3): 195-207.

Agarwal, N., N. Kewalramani, et al. (1991). Effects of water extracts of neem (*Azadirachta indica*) on the activity of hydrolytic enzymes of mixed rumen bacteria from buffalo. *Journal Of The Science Of Food And Agriculture* 57(1): 147-150.

Ahmed, A. A. and N. N. Puzari (1991). Initial growth and survival of different forest tree species in Assam. *Indian Forester* 117(7): 549-552.

Alam, M. M. (1991). Control of plant-parasitic nematodes with oilseed cakes on some vegetables in field. *Pakistan Journal Of Nematology* 9(1): 21-30.

Anderson, J. C., S. V. Ley, et al. (1991). Chemistry of insect antifeedants from *Azadirachta indica*: Part 8. Synthesis of hydroxydihydrofuran acetal fragments for biological evaluation and azadirachtin total synthesis studies. *Tetrahedron* 47(33): 6813-6850.

Atiri, G. I., M. F. Ivbijaro, et al. (1991). Effects of natural and synthetic chemicals on the incidence and severity of okra mosaic virus in okra. *Tropical Agriculture* 68(2): 178-180.

Bardhan, J., S. S. Riar, et al. (1991). Neem oil: A fertility controlling agent in rhesus monkey. *Indian Journal Of Physiology And Pharmacology* 35(4): 278-280.

Burman, U., S. Kathju, et al. (1991). Water management of transplanted seedlings of *Azadirachta indica* in arid areas. *Forest Ecology And Management* 40(1-2): 51-64.

Das, M. L. and Y. D. Pande (1991). Evaluation of insecticides and leaf extract of *Azadirachta indica* L. against *Dialeurodes pallida* Singh. *Uttar Pradesh Journal Of Zoology* 11(1): 25-30.

- Dreschsel, P., B. Glaser, et al. (1991). Effect of four multipurpose tree species on soil amelioration during tree fallow in Central Togo. *Agroforestry Systems* 16(3): 193-202.
- Dreyer, M. and C. Hellpap (1991). Neem: A promising natural insecticide for small scale vegetable production in tropical and subtropical countries. *Zeitschrift Fuer Pflanzenkrankheiten Und Pflanzenschutz* 98(4): 428-437.
- Dubey, O. P., S. C. Odak, et al. (1991). Evaluation of anti-feeding properties of indigenous medicinal plants against the larvae of *Heliothis armigera* (Hubner). *Journal Of Entomological Research* 15(3): 208-211.
- Ermel, K., H. O. Kalinowski, et al. (1991). Isolation and characterization of marrangin, a new insect growth regulating (IGR) substance from the seed kernels of the marrango tree, *Azadirachta excelsa* (Jack). *Journal Of Applied Entomology* 112(5): 512-519.
- Freisewinkel, D. C. and H. Schmutterer (1991). Contact effect of neem oil in the African migratory locust *Locusta migratoria migratorioides* (R. and F.). *Zeitschrift Fuer Angewandte Zoologie* 78(2): 189-203.
- Garcia, E. S., M. S. Gonzales, et al. (1991). Effects of azadirachtin in *Rhodnius prolixus*: Data and hypotheses. *Memorias Do Instituto Oswaldo Cruz Rio De Janeiro* 86(Suppl. 2): 107-112.
- Gill, H. S. and I. P. Abrol (1991). Salt affected soils, their afforestation and its ameliorating influence. *International Tree Crops Journal* 6(4): 239-260.
- Govindachari, T. R., G. Sandhya, et al. (1991). Isolation of novel azadirachtins H and I by high-performance liquid chromatography. *Chromatographia* 31(5-6): 303-305.
- Gupta, G. N. (1991). Effects of mulching and fertilizer application on initial development of some tree species. *Forest Ecology And Management* 44(2-4): 211-222.
- Gupta, H. C., S. S. Bareth, et al. (1991). Bio-efficacy of edible and non-edible oils against pulse beetle (*Callosobruchus chinensis* L.) on stored pulses and their effect on germination. *Agricultural And Biological Research* 7(2): 101-107.
- Isman, M. B., O. Koul, et al. (1991). Developing a neem-based insecticide for Canada. *Memoirs Of The Entomological Society Of Canada*(159): 39-47.
- Iyer, S. R. and D. Williamson (1991). Efficacy of some plant extracts to inhibit the protease activity of *Trichophyton* species. *Geobios* 18(1): 3-6.
- Jackai, L. E. N. and I. O. Oyediran (1991). The potential of neem *Azadirachta indica* A. Juss. for controlling post-flowering pests of cowpea, *Vigna unguiculata* Walp: I. The pod borer, *Maruca testulalis*. *Insect Science And Its Application* 12(1-3): 103-110.
- Kadir, A. A. and J. D. Connolly (1991). Preparation of 3-deacetylazadirachtin using azadirachtin isolated from *Azadirachta indica* seed. *Journal Of Tropical Forest Science* 3(4): 342-347.
- Kaethner, M. (1991). Potential of neem seed kernel products for the control of the cockchafers *Melolontha hippocastani* F. and *Melolontha melolontha* L. (Coleoptera, Scarabaeidae). *Journal Of Applied Entomology* 112(4): 345-352.
- Khan, W. M., A. N. H. Naqvi, et al. (1991). Toxicity of crude neem extracts (N-4) and N-9 against late 2nd instar larvae of *Musca domestica* L. (PSCIR strain). *Pakistan Journal Of Pharmaceutical Sciences* 4(1): 77-82.
- Klocke, J. A. and I. Kubo (1991). Defense of plants through regulation of insect feeding behavior. *Florida Entomologist* 74(1): 18-23.
- Kolb, H. C. and S. V. Ley (1991). Chemistry of insect antifeedants from *Azadirachta indica*: Part 10. Synthesis of a highly functionalised decalin fragment of azadirachtin. *Tetrahedron Letters* 32(43): 6187-6190.
- Koul, O. and M. B. Isman (1991). Effects of azadirachtin on the dietary utilization and development of the variegated cutworm *Peridroma saucia*. *Journal Of Insect Physiology* 37(8): 591-598.
- Ley, S. V., J. C. Anderson, et al. (1991). Chemistry of insect antifeedants from *Azadirachta indica*: (Part 11): Characterisation and structure activity relationships of some novel rearranged azadirachtins. *Tetrahedron* 47(44): 9231-9246.
- Ley, S. V., P. J. Lovell, et al. (1991). Chemistry of insect antifeedants from *Azadirachta indica*: Part 9. Oxidative reactions of azadirachtin derivatives leading to C8-C14 bond cleavage. *Tetrahedron Letters* 32(43): 6183-6186.
- Mukherjee, D., S. Mitra, et al. (1991). Effect of oilcakes on changes in carbon, nitrogen and microbial population in soil. *Journal Of The Indian Society Of Soil Science* 39(3): 457-462.
- Naqvi, S. N. H., S. O. Ahmed, et al. (1991). Toxicity and IGR effect of two new neem products against *Aedes aegypti* (PSCIR strain). *Pakistan Journal Of Pharmaceutical Sciences* 4(1): 71-76.

- Nath, S., P. K. Das, et al. (1991). Suitability of different forest species for social forestry programme under different soil conditions: Part III. Coastal soil. *Indian Forester* 117(8): 625-631.
- Nicol, C. M. Y. and H. Schmutterer (1991). Contact effects of seed oil from the neem tree, *Azadirachta indica* (A. Juss.), on nymphs of the gregarious phase of the desert locust, *Schistocerca gregaria* (Forsk.). *Journal Of Applied Entomology* 111(2): 197-205.
- Ponnuswamy, A. S., R. S. V. Rai, et al. (1991). Studies on maintaining seed longevity and the effect of fruit grades in neem (*Azadirachta indica*). *Journal Of Tropical Forest Science* 3(3): 285-290.
- Prakash, A. O., A. Mishra, et al. (1991). Effect of ethanolic extract of *Azadirachta indica* seeds on organs in female rats. *Fitoterapia* 62(2): 99-106.
- Price, J. F. and D. J. Schuster (1991). Effects of natural and synthetic insecticides on sweet potato whitefly *Bemisia tabaci* (Homoptera:Aleyrodidae) and its hymenopterous parasitoids. *Florida Entomologist* 74(1): 60-68.
- Radcliffe, E. B., F. V. Dunkel, et al. (1991). Antifeedant effect of neem, *Azadirachta indica* A. Juss., kernel extracts on *Kraussaria angulifera* (Krauss) (Orthoptera: Acrididae), a Sahelian grasshopper. *Tropical Agriculture* 68(1): 95-101.
- Reddy, M. S. and P. K. Chhonkar (1991). Urease activity in soil and flood water as influenced by regulatory chemicals and oxygen stress. *Journal Of The Indian Society Of Soil Science* 39(1): 84-88.
- Riar, S. S., C. Devakumar, et al. (1991). Antifertility activity of volatile fraction of neem oil. *Contraception* 44(3): 319-326.
- Satyanarayana, G. and K. Pushpalatha (1991). Fly ash induced foliar injury and proline metabolism in plants growing near power house. *Advances In Plant Sciences* 4(2): 289-303.
- Siddiqui, S., Ghiasuddin, et al. (1991). Nimbocinol and 17-epinimbocinol: Alkaline hydrolysis products of azadiradione. *Pakistan Journal Of Scientific And Industrial Research* 34(1): 1-3.
- Siddiqui, S., B. S. Siddiqui, et al. (1991). Tetracyclic triterpenoids of the fruit coats of *Azadirachta indica*. *Journal Of Natural Products* 54(2): 408-415.
- Singh, R. P., P. Singh, et al. (1991). Studies on controlled release of nitrogen fertilizers and nitrification inhibitors. *Indian Journal Of Agricultural Research* 25(2): 59-62.
- Taheruzzaman, Q. and D. P. Kushari (1991). Influence of leaf leachate-enriched water of neem (*Azadirachta indica* A. Juss.) and shirish (*Albizia lebbek* Benth.) on the growth of *Eichhornia crassipes* (Mart.) Solms. *Aquatic Botany* 40(1): 1-10.
- Tanzubil, P. B. (1991). Control of some insect pests of cowpea (*Vigna unguiculata*) with neem (*Azadirachta indica* A. Juss.) in Northern Ghana. *Tropical Pest Management* 37(3): 216-217.
- Van, D. N. J. M., D. S. W. G. Van, et al. (1991). Activity-guided isolation and identification of *Azadirachta indica* bark extract constituents which specifically inhibit chemiluminescence production by activated human polymorphonuclear leukocytes. *Planta Medica* 57(1): 65-68.
- Yadav, M. D. and K. D. N. Singh (1991). Transformations of applied nitrogen in relation to its availability to sugarcane in a calcareous soil. *Journal Of The Indian Society Of Soil Science* 39(2): 292-297.
- Agrawal, I. L. (1990). Ovicidal activity of some phytochemicals on *Myloccerus undecimpustulatus* Faust (Coleoptera: Curculionidae). *Indian Journal Of Entomology* 52(1): 35-38.
- Alam, M. M., M. B. Siddiqui, et al. (1990). Treatment of diabetes through herbal drugs in rural India. *Fitoterapia* 61(3): 240-242.
- Ara, I., B. A. Siddiqui, et al. (1990). Three new diterpenoids from the stem bark of *Azadirachta indica*. *Journal Of Natural Products* 53(4): 816-820.
- Ara, I., B. S. Siddiqui, et al. (1990). Tricyclic diterpenes from the stem bark of *Azadirachta indica*. *Planta Medica* 56(1): 84-86.
- Ara, I., B. S. Siddiqui, et al. (1990). Tricyclic diterpenoids from root bark of *Azadirachta indica*. *Phytochemistry* 29(3): 911-914.
- Bokel, M., R. Cramer, et al. (1990). Tetranortriterpenoids related to nimbin and nimbolide from *Azadirachta indica* A. Juss. *Tetrahedron* 46(3): 775-782.
- Chellayan, S. and G. K. Karnavar (1990). Inhibition of ovarian development by neem kernel extract in *Trogoderma granarium*. *Journal Of Animal Morphology And Physiology* 37(1-2): 109-112.
- Choudhary, D. N., J. N. Singh, et al. (1990). Antifertility effects of leaf extracts of some plants in male rats. *Indian Journal Of Experimental Biology* 28(8): 714-716.

- El, H. Z. M. and T. S. Kholief (1990). Biochemical studies on hypoglycemic agents: (I). Effect of *Azadirachta indica* leaf extract. *Archives Of Pharmacal Research* 13(1): 108-112.
- Farooq, M., R. C. Gupta, et al. (1990). Sulfur dioxide abatement capabilities of *Azadirachta indica* A. Juss. *Journal Of Environmental Science And Health Part A Environmental Science And Engineering* 25(7): 765-774.
- Gaikwad, B. R., T. Mayelvaganan, et al. (1990). Nimboicinol and 17-epinimboicinol from the nimbidin fraction of neem oil. *Phytochemistry* 29(12): 3963-3965.
- Garg, A. K. and K. Nath (1990). Solvent extracted neem (*Azadirachta indica* A. Juss) seed cake in the ration of growing crossbred calves. *Indian Journal Of Animal Nutrition* 7(3): 199-202.
- Gupta, G. N. and S. Mohan (1990). Response of several tree species to management on degraded soil of semi-arid region. *Indian Forester* 116(8): 622-630.
- Huang, H. P. and E. D. Morgan (1990). Analysis of azadirachtin by supercritical-fluid chromatography. *Journal Of Chromatography* 519(1): 137-144.
- Ivbijaro, M. F. (1990). The efficacy of seed oils of *Azadirachta indica* A. Juss and *Piper guineense* Schum and Thonn on the control of *Callosobruchus maculatus* F. *Insect Science And Its Application* 11(2): 149-152.
- Ivbijaro, M. F. and O. O. Bolaji (1990). Effects of cypermethrin plus dimethoate and extracts of *Piper guineense* and *Azadirachta indica* on the pests and yield of cowpea, *Vigna unguiculata*. *Journal Of Agricultural Science* 115(2): 227-232.
- Jha, M. and L. D. Choudhary (1990). Trial on stump planting of some tree species. *Indian Forester* 116(4): 283-285.
- Jilani, G. and R. C. Saxena (1990). Repellent and feeding deterrent effects of turmeric oil, sweetflag oil, neem oil, and a neem-based insecticide against lesser grain borer (Coleoptera: Bostrychidae). *Journal Of Economic Entomology* 83(2): 629-634.
- Karpha, T. K., M. Ghosal, et al. (1990). Total synthesis of racemic nimbidiol dimethyl ether and racemic nimbiol methyl ether. *Indian Journal Of Chemistry Section B Organic Chemistry Including Medicinal Chemistry* 29(4): 301-303.
- Koul, O., M. B. Isman, et al. (1990). Properties and uses of neem, *Azadirachta indica*. *Canadian Journal Of Botany* 68(1): 1-11.
- Lakshmanan, K. K. and A. S. S. Naryanan (1990). Antifertility herbals used by the tribals in Anaikkatty Hills, Coimbatore District, Tamil Nadu (India). *Journal Of Economic And Taxonomic Botany* 14(1): 171-173.
- Madamwar, D., V. Patel, et al. (1990). Effect of agricultural and other wastes on anaerobic digestion of water hyacinth-cattle dung. *Journal Of Fermentation And Bioengineering* 70(5): 343-344.
- Mahapatra, P., D. Panda, et al. (1990). Efficiency of urea-based fertilizers for wetland rice (*Oryza sativa*). *Journal Of Agricultural Science* 114(2): 187-192.
- Meisner, J., M. Klein, et al. (1990). Effect of Margosan-O on the development of *Earias insulana*. *Phytoparasitica* 18(4): 287-298.
- Mishra, B., R. D. Sharma, et al. (1990). Effect of neem cake and shellac coating of urea and green manure on ammonia volatilization and nitrogen use efficiency for rice. *Journal Of The Indian Society Of Soil Science* 38(2): 224-228.
- Mohan, S., K. G. Prasad, et al. (1990). Fertilizer response of selected social forestry species under varying soil texture. *Indian Forester* 116(1): 49-57.
- Mubarak, A. M. and C. P. Kulatilleke (1990). Sulfur constituents of neem seed volatiles: A revision. *Phytochemistry* 29(10): 3351-3352.
- Pascual, N., M. P. Marco, et al. (1990). Azadirachtin induced imaginal molt deficiencies in *Tenebrio molitor* L. (Coleoptera: Tenebrionidae). *Journal Of Stored Products Research* 26(1): 53-58.
- Punhani, R. K. and K. S. Pruthi (1990). Lateral bearing strength of *Azadirachta indica* (neem) under common wire nails. *Indian Forester* 116(10): 825-831.
- Ramesh, K. and M. A. Padhya (1990). In vitro propagation of neem, *Azadirachta indica* (A. Juss), from leaf discs. *Indian Journal Of Experimental Biology* 28(10): 932-935.
- Rao, M. V. and P. S. Dubey (1990). Explanations for the differential response of certain tropical tree species to sulfur dioxide under field conditions. *Water Air And Soil Pollution* 51(3-4): 297-306.
- Reddy, M. S. and P. K. Chhonkar (1990). Dissimilatory nitrate reductase in soil and flood water as influenced by regulatory chemicals and oxygen stress. *Journal Of The Indian Society Of Soil Science* 38(4): 658-662.
- Reddy, P. V. R., K. C. Chitra, et al. (1990). Field evaluation of certain plant extracts for the control of brinjal spotted leaf beetle,



Henosepilachna vigintioctopunctata Fab. Journal Of Insect Science 3(2): 194-195.

Satyanarayana, G., K. Pushpalatha, et al. (1990). Dust loading and leaf morphological trait changes of plants growing in automobile polluted area. Advances In Plant Sciences 3(1): 125-130.

Schmutterer, H. (1990). Observations on pests of Azadirachta indica (neem tree) and of some Melia spp. Journal Of Applied Entomology 109(4): 390-400.

Schmutterer, H. and T. Freres (1990). Influence of neem-seed oil on metamorphosis, color and behavior of the desert locust, Schistocerca gregaria (Forsk.) and of the African migratory locust, Locusta migratoria migratorioides (R. and F.). Zeitschrift Fuer Pflanzenkrankheiten Und Pflanzenschutz 97(4): 431-438.

Siddiqui, S., B. S. Siddiqui, et al. (1990). New meliacin analogues from epoxyazadiradione. Pakistan Journal Of Scientific And Industrial Research 33(9): 359-366.

Singh, P. P., A. Y. Junnarkar, et al. (1990). A pharmacological study of Azadirachta indica. Fitoterapia 61(2): 164-168.

Srivastava, R. C. (1990). A taxonomic study of the family Meliaceae of Madhya Pradesh (India). Journal Of Economic And Taxonomic Botany 14(2): 448-452.

Zeringue, H. J. J. and D. Bhatnagar (1990). Inhibition of aflatoxin production in Aspergillus flavus infected cotton bolls after treatment with neem (Azadirachta indica) leaf extracts. Journal Of The American Oil Chemists' Society 67(4): 215-216.

Ahmed, S., S. Bamofleh, et al. (1989). Cultivation of neem (Azadirachta indica, Meliaceae) in Saudi Arabia. Economic Botany 43(1): 35-38.

Ara, I., B. S. Siddiqui, et al. (1989). Margosinone and margosinolone, two new polyacetate derivatives from Azadirachta indica. Fitoterapia 60(6): 519-524.

Ara, I., B. S. Siddiqui, et al. (1989). Structurally novel diterpenoid constituents from the stem bark of Azadirachta indica (Meliaceae). Journal Of The Chemical Society Perkin Transactions I(2): 343-346.

Ayyangar, G. S. G. and P. J. Rao (1989). Neem (Azadirachta indica A. Juss) extracts as larval repellents and ovipositional deterrents to Spodoptera litura (Fabr.). Indian Journal Of Entomology 51(2): 121-124.

Chakraborty, E. and S. R. Das (1989). In vitro and in vivo effects of some natural products against experimental amoebiasis caused by Entamoeba histolytica. Agricultural And Biological Research 5(1-2): 29-36.

Chauhan, J. S., N. K. Singh, et al. (1989). Screening of higher plants for specific herbicidal principle active against dodder, Cuscuta reflexa Roxb. Indian Journal Of Experimental Biology 27(10): 877-884.

Dasgupta, A. and G. P. K. Sen (1989). Effects of different soil amendments on wilt of pigeonpea (Cajanus cajan (L.) HUTH) caused by Fusarium udum Butler. Beitrage Zur Tropischen Landwirtschaft Und Veterinaermedizin 27(3): 341-346.

Downham, M. C. A. (1989). Effects of neem extracts and a pyrethroid upon rice insect fauna: Implications for the role of natural enemies. Journal Of Plant Protection In The Tropics 6(3): 157-172.

Fatima, K. and C. G. K. Ramanujam (1989). Pollen analysis of two multifloral honeys from Hyderabad, India. Journal Of Phytological Research 2(2): 167-172.

Flint, H. M. and N. J. Parks (1989). Effect of azadirachtin from the neem tree on immature sweetpotato whitefly, Bemisia tabaci (Homoptera: Aleyrodidae) and other selected pest species on cotton. Journal Of Agricultural Entomology 6(4): 211-216.

Govindaiah, N. Suryanarayana, et al. (1989). Effect of mulching of green leaves for the control of root-knot nematode in mulberry. Indian Journal Of Nematology 19(1): 25-28.

Grewal, P. S. (1989). Effects of leaf-matter incorporation on Aphelenchoides composticola (Nematoda), mycofloral composition, mushroom compost quality and yield of Agaricus bisporus. Annals Of Applied Biology 115(2): 299-312.

Gupta, K., G. K. Barat, et al. (1989). Nutrient contents and antinutritional factors in conventional and non-conventional leafy vegetables. Food Chemistry 31(2): 105-116.

John, P. S., R. J. Buresh, et al. (1989). Nitrogen-15 balances for urea and neem coated urea applied to lowland rice following two cowpea cropping systems. Plant And Soil 120(2): 233-242.

Khalid, S. A., H. Duddeck, et al. (1989). Isolation and characterization of an antimalarial agent of the neem tree Azadirachta indica. Journal Of Natural Products 52(5): 922-926.

Khan, D., S. Ismail, et al. (1989). Field trial of Azadirachta indica (L.) A. Juss. under highly saline water irrigation at arid sandy coastal region of Pakistan. Pakistan Journal Of Botany 21(1): 59-67.

- Kossou, D. K. (1989). Evaluation of different products from the neem tree, *Azadirachta indica* (A. Juss) for the control of *Sitophilus zeamais* (Motsch) on stored maize. *Insect Science And Its Application* 10(3): 365-372.
- Krishnayya, N. S. R. and S. J. Bedi (1989). Effect of sulfur dioxide and ascorbic acid on the plastid ultrastructure of *Azadirachta indica* leaves. *Annals Of Botany* 64(3): 311-314.
- Ley, S. V., J. C. Anderson, et al. (1989). Insect antifeedants from *Azadirachta indica*: (Part 5). Chemical modification and structure-activity relationships of azadirachtin and some related limonoids. *Tetrahedron* 45(16): 5175-5192.
- Ley, S. V., A. A. Somovilla, et al. (1989). Chemistry of insect antifeedants from *Azadirachta indica*: (Part 4). Synthesis towards the limonoid azadirachtin; preparation of a functionalized decalin fragment. *Tetrahedron* 45(7): 2143-2164.
- Maithani, G. P., V. K. Bahuguna, et al. (1989). Fruit maturity and interrelated effects of temperature and container on longevity of neem (*Azadirachta indica*) seeds. *Indian Forester* 115(2): 89-97.
- Makanjuola, W. A. (1989). Evaluation of extracts of neem (*Azadirachta indica* A. Juss) for the control of some stored product pests. *Journal Of Stored Products Research* 25(4): 231-238.
- Mehrotra, M. D. (1989). Leaf blight of some hardwood species in Assam (India) and Meghalaya (India) and its control in the nursery. *Indian Forester* 115(6): 378-384.
- Melamed, M. V., J. Meisner, et al. (1989). Effects of neem on the corn borer, *Sesamia nonagrioides* Lefebvre (Lepidoptera: Noctuidae). *Zeitschrift Fuer Pflanzenkrankheiten Und Pflanzenschutz* 96(5): 521-525.
- Mikolajczak, K. L., B. W. Zilkowski, et al. (1989). Effect of meliaceous seed extracts on growth and survival of *Spodoptera frugiperda* (J. E. Smith). *Journal Of Chemical Ecology* 15(1): 121-128.
- Naina, N. S., P. K. Gupta, et al. (1989). Genetic transformation and regeneration of transgenic neem (*Azadirachta indica*) plants using *Agrobacterium tumefaciens*. *Current Science* 58(4): 184-187.
- Nath, K., D. K. Agrawal, et al. (1989). Water-washed neem (*Azadirachta indica*) seed kernel cake in the feeding of milch cows. *Animal Production* 48(3): 497-502.
- Nishikimi, Y., T. Iimori, et al. (1989). Synthetic studies of azadirachtin: Synthesis of the cyclic acetal intermediate in the naturally occurring form. *Journal Of Organic Chemistry* 54(14): 3354-3359.
- Panda, D., K. R. Mahata, et al. (1989). Transformation and loss of nitrogen due to leaching and ammonia volatilization in wetland rice (*Oryza sativa*) soil. *Indian Journal Of Agricultural Sciences* 59(2): 91-96.
- Pradhan, P., S. N. Das, et al. (1989). Effect of some organic oils on the infectivity of root-knot nematode (*Meloidogyne incognita*) affecting tomato. *Indian Journal Of Nematology* 19(2): 162-165.
- Prasad, R., B. Prasad, et al. (1989). Effect of some non-edible oils on retardation of nitrification, yield and nitrogen uptake by rice (*Oryza sativa*) in calcareous soil. *Indian Journal Of Agricultural Sciences* 59(5): 291-294.
- Purohit, P., D. Jyotsna, et al. (1989). Antifeedant activity of indigenous plant extracts against larvae of castor semi-looper. *Pesticides* 23(1): 23-26.
- Qamar, F., M. Saeed, et al. (1989). Nematicidal properties of crude extracts of some indigenous plants: Part I. *Pakistan Journal Of Scientific And Industrial Research* 32(9): 600-602.
- Qamar, F., M. Saeed, et al. (1989). Control of anguinosity of wheat using plant extracts. *Pakistan Journal Of Scientific And Industrial Research* 32(4): 260-261.
- Ramert, B. and G. Nehlin (1989). Alternative plant protection methods in small scale cultivation. *Vaxtskyddsnotiser(Suppl. 2)*: 1-39.
- Rojatkar, S. R., V. S. Bhat, et al. (1989). Tetranortriterpenoids from *Azadirachta indica*. *Phytochemistry* 28(1): 203-206.
- Sarkar, M. S. and P. C. Datta (1989). Comparative pharmacognostic studies on the leaf drugs of *Azadirachta indica* and *Melia azedarach*. *Journal Of Economic And Taxonomic Botany* 13(1): 236-240.
- Schmutterer, H. (1989). First investigations of insecticidal effects of methanolic extracts from the leaves and bark of the Philippine neem tree, *Azadirachta integrifoliola* Merr., and comparison of these effects to those of extracts from *Azadirachta indica* (A. Juss) and *Melia azedarach* L. *Journal Of Applied Entomology* 108(5): 483-489.
- Sharma, B. D. and I. C. Gupta (1989). Effect of rate and source of nitrogen and moisture content of soil on ammonia volatilization from sandy soils. *Journal Of The Indian Society Of Soil Science* 37(4): 665-669.
- Shin, F. C. (1989). Studies on plants as a source of insect growth regulators for crop protection. *Journal Of Applied Entomology*

107(2): 185-192.

Siddiqui, S., Ghiasuddin, et al. (1989). Tetranortriterpenoids and steroidal glycosides from the seeds of *Azadirachta indica* A. Juss. *Pakistan Journal Of Scientific And Industrial Research* 32(7): 435-438.

Siddiqui, S., B. S. Siddiqui, et al. (1989). Tetranortriterpenoids from *Azadirachta indica* A. Juss (Meliaceae). *Heterocycles* 29(1): 87-96.

Singh, M. and T. A. Singh (1989). Comparison of neem (*Azadirachta indica*) oil coated urea with some other coated urea fertilizers on an alkaline calcareous soil. *Journal Of The Indian Society Of Soil Science* 37(2): 314-318.

Sridhar, S. and J. S. Chetty (1989). Effect of *Azadirachta indica* and *Pongamia glabra* leaf extracts on food utilization and modulation of efficiency of digestive enzymes in *Euproctis fraterna* (Lepidoptera: Lymantriidae). *Proceedings Of The Indian Academy Of Sciences Animal Sciences* 98(5): 313-324.

Talpada, P. M., H. B. Desai, et al. (1989). Tannin content in some agro-industrial byproducts of Gujarat (India). *Indian Journal Of Animal Nutrition* 6(2): 181-182.

Tewari, R. K., S. Pathak, et al. (1989). Biochemical and histological studies of reproductive organs in cyclic and ovariectomized rats supporting a non-hormonal action for neem oil. *Journal Of Ethnopharmacology* 25(3): 281-294.

Thomas, O. O. (1989). Perspectives on ethno-phytotherapy of "Yoruba" medicinal herbs and preparations. *Fitoterapia* 60(1): 49-60.

Tidjani, M. A., C. Dupont, et al. (1989). *Azadirachta indica* stem bark extract anti-inflammatory activity. *Plantes Medicinales Et Phytotherapie* 23(4): 259-266.

Van, D. N. J. M., L. A. T'Hart, et al. (1989). Characterization of anti-complement compounds from *Azadirachta indica*. *Journal Of Ethnopharmacology* 27(1-2): 15-24.

Verma, S. C. (1989). Termite pests of forestry and agriculture in Haryana, India. *Indian Journal Of Forestry* 12(1): 1-6.

Virk, A. S., H. Steingass, et al. (1989). Studies on in vitro degradation and in vivo digestion of a slow ammonium releasing urea product. *Archives Of Animal Nutrition* 39(1-2): 167-176.

Viswanathan, M. B. (1989). Ethnobotany of the Malayalis in the Yelagiri hills of North Arcot district, Tamil nadu (India). *Journal Of Economic And Taxonomic Botany* 13(3): 667-672.

Agrawal, I. L. and S. B. Mall (1988). Studies on the insecticidal and antifeedant activity of some plant extracts on Bihar hairy caterpillar, *Diacrisia obliqua* Walker (Lepidoptera, Arctiidae). *Journal Of Applied Entomology* 105(5): 529-532.

Aziz, P. (1988). Effect of neem/bekain leaf and bark powder on the storage of maize and gram. *Pakistan Journal Of Agricultural Research* 9(4): 483-487.

Banik, B. K., S. Ghosh, et al. (1988). Stereoselective total synthesis of racemic nimbidiol. *Indian Journal Of Chemistry Section B Organic Chemistry Including Medicinal Chemistry* 27(2): 103-104.

Bapna, S., D. M. Renapurkar, et al. (1988). Cyclopicidal activity of three indigenous plant extracts. *Insect Science And Its Application* 9(2): 211-212.

Bhatti, G. H. and M. Z. Iqbal (1988). Investigations into the effect of automobile exhausts on the phenology, periodicity and productivity of some roadside trees. *Acta Societatis Botanicorum Poloniae* 57(3): 395-400.

Chaney, W. R. and D. M. Knudson (1988). Germination of seeds of *Azadirachta indica* enhanced by endocarp removal. *International Tree Crops Journal* 5(3): 153-162.

Chaturvedi, A. N., S. C. Sharma, et al. (1988). Water consumption and biomass production of some forest tree species. *International Tree Crops Journal* 5(1-2): 71-76.

Farooq, M., R. P. Saxena, et al. (1988). Sulfur dioxide resistance of Indian trees: I. Experimental evaluation of visible symptoms and sulfur dioxide sorption. *Water Air And Soil Pollution* 40(3-4): 307-316.

Gandhi, M., R. Lal, et al. (1988). Acute toxicity study of the oil from *Azadirachta indica* seed (neem oil). *Journal Of Ethnopharmacology* 23(1): 39-52.

Gupta, H. C., J. P. Verma, et al. (1988). Evaluation of some non-edible oils as grain protectant in wheat and their subsequent effect on germination. *Indian Journal Of Entomology* 50(2): 147-150.

Haque, M. A. and B. N. Islam (1988). Effects of methanolic neem and chinaberry seed extracts on rice green leafhopper (*Nephotettix nigropictus* Stal). *Bangladesh Journal Of Agriculture* 13(1): 53-58.

- Jain, R. K. and D. S. Bhatti (1988). Integrated control of root-knot nematode, *Meloidogyne javanica* infecting tomato. *Indian Journal Of Nematology* 18(1): 30-34.
- Kirsch, K. and H. Schmutterer (1988). Low efficacy of a *Bacillus thuringiensis* (Berl.) formulation in controlling the diamondback moth, *Plutella xylostella* (L.), in the Philippines. *Journal Of Applied Entomology* 105(3): 249-255.
- Komolafe, O. O., C. P. Anyabuikie, et al. (1988). The possible role of mixed-function oxidases in the hepatobiliary toxicity of *Azadirachta indica*. *Fitoterapia* 59(2): 109-114.
- Kumawat, D. M. and P. S. Dubey (1988). Steel industry aerial discharges and response of two tree species. *Geobios* 15(4): 176-180.
- Lee, S. M., J. I. Olsen, et al. (1988). 7-deacetyl-17-beta-hydroxyazadiradione, a new limonoid insect growth inhibitor from *Azadirachta indica*. *Phytochemistry* 27(9): 2773-2776.
- Maheswari, T. U., A. Mani, et al. (1988). Efficacy of the bacterial spore parasite, *Pasteuria penetrans* and oil cakes in the control of *Meloidogyne javanica* on tomato. *Journal Of Biological Control* 2(1): 34-36.
- Maithani, G. P., V. K. Bahuguna, et al. (1988). Studies on nursery techniques (method of sowing and optimum depth of sowing) of *Azadirachta indica* A. Juss under North Indian moist tropical climatic conditions. *Indian Forester* 114(8): 440-445.
- Mishra, A. S. and G. P. Rao (1988). Inhibition of tobacco mosaic virus by root extracts of higher plants. *Phytophylactica* 20(1): 93-94.
- Nair, M. N. B. (1988). Wood anatomy and heartwood formation in neem (*Azadirachta indica* A. Juss.). *Botanical Journal Of The Linnean Society* 97(1): 79-90.
- Patel, V. K. and B. H. Venkatakrishna (1988). Folklore therapeutic indigenous plants in periodontal disorders in India: (review, experimental and clinical approach). *International Journal Of Clinical Pharmacology Therapy And Toxicology* 26(4): 176-184.
- Prakash, A. O., R. K. Tewari, et al. (1988). Non-hormonal post-coital contraceptive action of neem oil in rats. *Journal Of Ethnopharmacology* 23(1): 53-60.
- Rai, V. R. S. and K. K. Suresh (1988). Agrosilvicultural studies Optimum species combination. *International Tree Crops Journal* 5(1-2): 1-8.
- Ramachandran, R., S. N. Mukherjee, et al. (1988). Hormetic effect of azadirachtin on *Tribolium castaneum* (Herbst) (Coleoptera: Tenebrionidae). *Indian Journal Of Experimental Biology* 26(11): 913-914.
- Rao, D. R., R. Reuben, et al. (1988). Evaluation of four azadirachtin rich fractions from Neem, *Azadirachta indica* A. Juss (Family: Meliaceae) as mosquito larvicides. *Indian Journal Of Malariology* 25(2): 67-72.
- Rao, M. V. S., Y. V. Rao, et al. (1988). Induction and growth of callus in *Azadirachta indica* Juss. *Crop Improvement* 15(2): 203-205.
- Raza, S. H., M. S. R. Murthy, et al. (1988). Air pollution tolerance index of certain plants of nacharam industrial area, Hyderabad (India). *Indian Journal Of Botany* 11(1): 91-95.
- Reddy, P. M. and P. A. Roger (1988). Dynamics of algal populations and acetylene-reducing activity in five rice soils inoculated with blue-green algae. *Biology And Fertility Of Soils* 6(1): 14-21.
- Rembold, H., T. Mueller, et al. (1988). Tissue-specific incorporation of azadirachtin in the Malpighian tubules of *Locusta migratoria*. *Zeitschrift Fuer Naturforschung Section C Biosciences* 43(11-12): 903-907.
- Riar, S. S., J. Bardhan, et al. (1988). Mechanism of antifertility action of neem oil. *Indian Journal Of Medical Research* 88(Oct): 339-342.
- Sankaran, K. V., E. J. M. Florence, et al. (1988). Foliar diseases of some forest trees in Kerala (India): New records. *Indian Journal Of Forestry* 11(2): 104-107.
- Siddiqui, M. A. and M. M. Alam (1988). Control of root-knot and reniform nematodes by bare-root dip in leaf extracts of margosa and Persian lilac. *Zeitschrift Fuer Pflanzenkrankheiten Und Pflanzenschutz* 95(2): 138-142.
- Siddiqui, S., I. Ara, et al. (1988). Phenolic tricyclic diterpenoids from the bark of *Azadirachta indica*. *Phytochemistry* 27(12): 3903-3908.
- Siddiqui, S., T. Mahmood, et al. (1988). Non-terpenoidal constituents from *Azadirachta indica*. *Planta Medica* 54(5): 457-459.
- Siddiqui, S., B. S. Siddiqui, et al. (1988). Tetracyclic triterpenoids and their derivatives from *Azadirachta indica*. *Journal Of Natural Products* 51(1): 30-43.

- Singh, A. K. and M. Singh (1988). Antiviral activity and physical properties of the extracts of *Azadirachta indica* L. *Indian Journal Of Virology* 4(1-2): 76-81.
- Singh, B., G. N. Gupta, et al. (1988). Use of mulches in establishment and growth of tree species on dry lands. *Indian Forester* 114(6): 307-316.
- Singh, K. D. N., C. R. Prasad, et al. (1988). Effect of gamma-BHC and blended urea on yield, nutrient uptake and quality of sugarcane in a calcareous soil. *Journal Of The Indian Society Of Soil Science* 36(3): 455-460.
- Singh, R. P., C. Devakumar, et al. (1988). Activity of neem (*Azadirachta indica* A. Juss) seed kernel extracts against the mustard aphid, *Lipaphis erysimi*. *Phytoparasitica* 16(3): 225-230.
- Umadevi, I., M. Daniel, et al. (1988). Chemosystematics of some Indian members of the family Meliaceae. *Feddes Repertorium* 99(5-6): 195-197.
- Webb, R. (1988). A preliminary investigation into the fodder qualities of some trees in Sudan. *International Tree Crops Journal* 5(1-2): 9-18.
- Zarroug, I. M. A., A. D. Nugud, et al. (1988). Evaluation of Sudanese plant extracts as mosquito larvicides. *International Journal Of Crude Drug Research* 26(2): 77-80.
- Adegbehin, J. O. (1987). The impact of afforestation in the northern areas of Nigeria. *International Tree Crops Journal* 4(2-3): 145-164.
- Ali, M. and J. S. Qadry (1987). Amino acid composition of fruits and seeds of medicinal plants. *Journal Of The Indian Chemical Society* 64(4): 230-231.
- Anderson, D. M. W., J. F. Howlett, et al. (1987). The hydroxyproline content of gum exudates from several plant genera. *Phytochemistry* 26(1): 309-311.
- Badam, L., R. P. Deolankar, et al. (1987). In vitro antimalarial activity of neem (*Azadirachta indica* A. Juss) leaf and seed extracts. *Indian Journal Of Malariology* 24(2): 111-118.
- Banerji, R., G. Misra, et al. (1987). Identification of 24-methylenelphenol from heartwood of *Azadirachta indica*. *Phytochemistry* 26(9): 2644-2645.
- Deshmukh, P. B. and D. M. Renapurkar (1987). Insect growth regulatory activity of some indigenous plant extracts. *Insect Science And Its Application* 8(1): 81-84.
- Ghosh, B. (1987). Some unreported medicinal uses of plants used by the tribals of District Begusarai, Bihar (India). *Journal Of Economic And Taxonomic Botany* 10(1): 187-190.
- Jain, P. P., R. K. Suri, et al. (1987). Fatty oils from oilseeds of forest origin as antibacterial agents. *Indian Forester* 113(4): 297-299.
- Koul, O. (1987). Antifeedant and growth inhibitory effects of calamus oil and neem oil on *Spodoptera litura* under laboratory conditions. *Phytoparasitica* 15(3): 169-180.
- Kraus, W., M. Bokel, et al. (1987). Structure determination by NMR of azadirachtin and related compounds from *Azadirachta indica* A. Juss (Meliaceae). *Tetrahedron* 43(12): 2817-2830.
- Kraus, W., A. Klenk, et al. (1987). Tetranortriterpenoid lactams with insect antifeeding activity from *Azadirachta indica* A. Juss (Meliaceae). *Liebigs Annalen Der Chemie*(4): 337-340.
- Kulkarni, H. D. and R. A. Srimathi (1987). Short note: An albina-type natural chlorophyll mutant in *Azadirachta indica* A. Juss. *Silvae Genetica* 36(1): 44-45.
- Lakshmi, V. V., P. Sridhar, et al. (1987). Inhibition of penicillinase by plant metabolites. *Indian Journal Of Experimental Biology* 25(11): 778-780.
- Lal, R., M. Gandhi, et al. (1987). Antifertility effect of *Azadirachta indica* oil administered per os to female albino rats on selected days of pregnancy. *Fitoterapia* 58(4): 239-242.
- Majumder, P. L., D. C. Maiti, et al. (1987). Nimbidiol, a modified diterpenoid of the root-bark of *Azadirachta indica*. *Phytochemistry* 26(1): 3021-3024.
- Mikolajczak, K. L. and D. K. Reed (1987). Extractives of seeds of the Meliaceae: Effects on *Spodoptera frugiperda* (J. E. Smith), *Acalymma vittatum* (F.), and *Artemia salina* Leach. *Journal Of Chemical Ecology* 13(1): 99-112.

- Mishra, R. M., S. Bhatnagar, et al. (1987). Studies on dispersal ecology of *Azadirachta indica* Juss. *Geobios* 14(5): 212-216.
- Nath, P. and J. Singh (1987). White grubs: A new pest problem in some pockets of eastern Uttar Pradesh (India). *Indian Journal Of Entomology* 49(2): 181-185.
- Olaifa, J. I., W. O. Erhun, et al. (1987). Insecticidal activity of some Nigerian plants. *Insect Science And Its Application* 8(2): 221-224.
- Pandey, N. D., L. Singh, et al. (1987). Effect of certain plant extracts against *Lipaphis erysimi* Kalt. under laboratory conditions. *Indian Journal Of Entomology* 49(2): 238-242.
- Pathak, P. H. and S. S. Krishna (1987). The influence of the odors of certain botanical components or an organic solvent dichloromethane during breeding on the reproductive efficiency of *Earias vittella* (F.) (Lepidoptera: Noctuidae). *Uttar Pradesh Journal Of Zoology* 7(2): 175-179.
- Polasa, K. and C. Rukmini (1987). Mutagenicity tests of cashewnut shell liquid, rice-bran oil and other vegetable oils using the *Salmonella typhimurium* microsome system. *Food And Chemical Toxicology* 25(10): 763-766.
- Rajamani, S., I. C. Pasalu, et al. (1987). Evaluation of insecticides and plant products for the control of insect pests of rainfed upland rice. *Indian Journal Of Plant Protection* 15(1): 43-50.
- Riazuddin, S., M. M. Malik, et al. (1987). Mutagenicity testing of some medicinal herbs. *Environmental And Molecular Mutagenesis* 10(2): 141-148.
- Schmutterer, H. and H. Holst (1987). On the effect of the enriched and formulated neem seed kernel extract AZT-VR-K on *Apis mellifera* L. *Journal Of Applied Entomology* 103(2): 208-213.
- Singh, B. and A. P. Singh (1987). Effect of neem kernel suspension on the hatchability of eggs of the desert locust (*Schistocerca gregaria* Forsk.). *Journal Of Advanced Zoology* 8(1): 52-54.
- Singh, P. P., A. Y. Junnarkar, et al. (1987). *Azadirachta indica*: Neuro-psychopharmacological and antimicrobial studies. *Fitoterapia* 58(4): 235-238.
- Turner, C. J., M. S. Tempesta, et al. (1987). An NMR spectroscopic study of azadirachtin and its trimethyl ether. *Tetrahedron* 43(12): 2789-2804.
- Van, D. N. J. M., J. P. A. M. Klerx, et al. (1987). Immunomodulatory activity of an aqueous extract of *Azadirachta indica* stem bark. *Journal Of Ethnopharmacology* 19(2): 125-132.
- Abatan, M. O. and M. J. Makinde (1986). Screening *Azadirachta indica* and *Pisum sativum* for possible antimalarial activities. *Journal Of Ethnopharmacology* 17(1): 85-94.
- Anderson, D. M. W., P. C. Bell, et al. (1986). The gum exudates from *Chloroxylon swietenia*, *Sclerocarya caffra*, *Azadirachta indica* and *Moringa oleifera*. *Phytochemistry* 25(1): 247-249.
- Ayoub, S. M. H. and L. K. Yankov (1986). The molluscicidal factor of tannin-bearing plants. *International Journal Of Crude Drug Research* 24(1): 16-18.
- Bansal, S. and A. Pillai (1986). Variations in the cotyledonary node of *Azadirachta indica*. *Acta Botanica Indica* 14(1): 54-56.
- Das, G. P. (1986). Pesticidal efficacy of some indigenous plant oils against the pulse beetle, *Callosobruchus chinensis* (Coleoptera:Bruchidae). *Bangladesh Journal Of Zoology* 14(1): 15-18.
- Dorn, A. (1986). Effects of azadirachtin on reproduction and egg development of the heteropteran *Oncopeltus fasciatus*. *Journal Of Applied Entomology* 102(3): 313-319.
- Dwivedi, R. S. and R. C. Dubey (1986). Effects of volatile and non-volatile fractions of two medicinal plants on germination of *Macrophomina phaseolina* sclerotia. *Transactions Of The British Mycological Society* 87(2): 326-328.
- Ezumah, B. S. (1986). Germination of storage of neem (*Azadirachta indica* A. Juss) seed. *Seed Science And Technology* 14(3): 593-600.
- Feuerhake, K. and H. Schmutterer (1986). Development of a standardized and formulated insecticide from a crude neem (*Azadirachta indica*) kernel extract. *Zeitschrift Fuer Pflanzenkrankheiten Und Pflanzenschutz* 92(6): 643-649.
- Hellpap, C. and J. C. Mercado (1986). Effect of neem on the oviposition behavior of the fall armyworm *Spodoptera frugiperda* Smith. *Journal Of Applied Entomology* 102(5): 463-467.
- Hongo, H. and A. K. Karel (1986). Effect of plant extracts on insect pests of common beans. *Journal Of Applied Entomology* 102(2): 164-169.

- Inamdar, J. A., R. B. Subramanian, et al. (1986). Studies on the resin glands of *Azadirachta indica* (Meliaceae). *Annals Of Botany* 58(3): 425-429.
- Iwu, M. M., O. Obidoa, et al. (1986). Biochemical mechanism of the antimalarial activity of *Azadirachta indica* leaf extract. *Pharmacological Research Communications* 18(1): 81-91.
- Khanduja, S. D. and V. L. Goel (1986). Pattern of variability in some fuel wood trees grown on sodic soils. *Indian Forester* 112(2): 118-123.
- Knodel, J. J., H. G. Larew, et al. (1986). Margosan-O, a commercial formulation of neem seed extract, controls *Liriomyza trifolii* on chrysanthemums. *Journal Of Agricultural Entomology* 3(3): 249-254.
- Kubo, I., A. Matsumoto, et al. (1986). New insect ecdysis inhibitory limonoid deacetylazadirachtinol isolated from *Azadirachta indica* (Meliaceae) oil. *Tetrahedron* 42(2): 489-496.
- Mannan, R. M., S. Periyanan, et al. (1986). Species specific chlorophyll a fluorescence-temperature profile at high temperatures in the leaves. *Photosynthesis Research* 8(1): 87-92.
- Mansour, F. A., K. R. S. Ascher, et al. (1986). Toxicity of neem (*Azadirachta indica*) seed kernel extracts prepared with different solvents, on the spider *Chiracanthium mildei*. *Phytoparasitica* 14(1): 73-76.
- Obaseki, O. and F. H. A. Jegede (1986). The antimalarial activity of *Azadirachta indica*. *Fitoterapia* 57(4): 247-251.
- Pant, N., H. S. Garg, et al. (1986). Sulfurous compounds from *Azadirachta indica* leaves. *Fitoterapia* 57(4): 302-304.
- Prasad, B., R. Prasad, et al. (1986). Evaluation of nitrification retardation property of non-edible oils and their influence on yield and nitrogen uptake by wheat in calcareous soil. *Journal Of The Indian Society Of Soil Science* 34(2): 281-285.
- Rao, P. J. and B. Subrahmanyam (1986). Azadirachtin induced changes in development, food utilization and hemolymph constituents of *Schistocerca gregaria*. *Journal Of Applied Entomology* 102(3): 217-224.
- Sankaran, K. V., M. Balasundaran, et al. (1986). Seedling diseases of *Azadirachta indica* in Kerala, India. *European Journal Of Forest Pathology* 16(5-6): 325-328.
- Santhi, S. R. and S. Palaniappan (1986). Effect of neem leaf (*Azadirachta indica*) on growth and yield of lowland rice (*Oryza sativa*). *Journal Of Agronomy And Crop Science* 157(2): 114-117.
- Sanyal, M., A. Mukherji, et al. (1986). Evaluation of root bark of *Azadirachta indica* (Meliaceae). *Journal Of Plant Anatomy And Morphology* 3(1): 13-20.
- Saxena, R. C. and Z. R. Khan (1986). Aberrations caused by neem oil odor in green leafhopper feeding on rice plants. *Entomologia Experimentalis Et Applicata* 42(3): 279-284.
- Siddiqui, S., S. Faizi, et al. (1986). Margosinolide and isomargosinolide, two new tetranortriterpenoids from *Azadirachta indica* (Meliaceae). *Tetrahedron* 42(17): 4849-4856.
- Siddiqui, S., S. Faizi, et al. (1986). Studies on the chemical constituents of *Azadirachta indica* (Meliaceae), Part VII. *Zeitschrift Fuer Naturforschung Teil B Anorganische Chemie Organische Chemie* 41(7): 922-924.
- Siddiqui, S., T. Mahmood, et al. (1986). Isolation of a triterpenoid from *Azadirachta indica*. *Phytochemistry* 25(9): 2183-2186.
- Siddiqui, S., B. S. Siddiqui, et al. (1986). Isoazadirolide, a new tetranortriterpenoid from *Azadirachta indica* A. Juss (Meliaceae). *Heterocycles* 24(11): 3163-3168.
- Singh, M. and T. A. Singh (1986). Leaching losses of nitrogen from urea as affected by application of neem cake. *Journal Of The Indian Society Of Soil Science* 34(4): 767-773.
- Thaker, A. M. and J. V. Anjaria (1986). Antimicrobial and infected wound healing response of some traditional drugs. *Indian Journal Of Pharmacology* 18(3): 171-174.
- Adhikary, S. (1985). Results of field trials to control the diamond-back moth, *Plutella xylostella*, by application of crude methanolic extracts and aqueous suspensions of seed kernels and leaves of neem, *Azadirachta indica*, in Togo. *Zeitschrift Fuer Angewandte Entomologie* 100(1): 27-33.
- Ahmad, R., D. Khan, et al. (1985). Growth of *Azadirachta indica* and *Melia azedarach* at coastal sand using highly saline water for irrigation. *Pakistan Journal Of Botany* 17(2): 229-234.
- Arnason, J. T., B. J. R. Philogene, et al. (1985). Antifeedant and insecticidal properties of azadirachtin to the European corn borer, *Ostrinia nubilalis*. *Entomologia Experimentalis Et Applicata* 38(1): 29-34.

- Balogun, A. M. and B. L. Fetuga (1985). Fatty acid composition of seed oils of some members of the Meliaceae and Combretaceae families. *Journal Of The American Oil Chemists' Society* 62(3): 529-531.
- Chari, M. S. and C. M. Muralidharan (1985). Neem (*Azadirachta indica* Linn.) as feeding deterrent of castor semilooper (*Achaea janata* Linn.). *Journal Of Entomological Research* 9(2): 243-245.
- Das, G. P. (1985). Infestation of bruchid beetle (*Callosobruchus chinensis*, Bruchidae: Coleoptera) on different pulse seed treated with neem (*Azadirachta indica*) and til (*Sesamum indicum*) oils. *Bangladesh Journal Of Agriculture* 10(4): 51-56.
- Ekong, D. E. U. and S. A. Ibiyemi (1985). Biosynthesis of nimbolide from (2-carbon-14, (4R)4-tritium) mevalonic acid lactone in the leaves of *Azadirachta indica*. *Phytochemistry* 24(10): 2259-2262.
- Hussain, F., I. Haq, et al. (1985). Phytotoxic effect of melia (Bakain) (*Azadirachta indica*) on cultivated plants and their productivity. *Pakistan Journal Of Agricultural Research* 6(2): 125-130.
- Lakhani, G. K. and N. G. Patel (1985). Nonpesticidal control of *Ephestia cautella*. *Pesticides* 19(1): 46-48.
- Meisner, J., M. V. Melamed, et al. (1985). Effect of an aqueous extract of neem seed kernel on larvae of the European corn borer, *Ostrinia nubilalis*. *Phytoparasitica* 13(3-4): 173-178.
- Mia, M. D., K. H. Kabir, et al. (1985). Efficacy of some indigenous plant materials as repellents to *Sitophilus oryzae* on stored maize. *Bangladesh Journal Of Agriculture* 10(3): 55-58.
- Mossa, J. S. (1985). A study on the crude antidiabetic drugs used in Arabian folk medicine. *International Journal Of Crude Drug Research* 23(3): 137-145.
- Muek, O. (1985). Biology, behavior and economic importance of parasites of harmful Lepidoptera on the Cape Verde Islands (Atlantic Ocean). *Neue Entomologische Nachrichten*(18): 1-168.
- Nair, M. N. B., J. R. Bhatt, et al. (1985). Induction of traumatic gum cavities in sapwood of the neem (*Azadirachta indica*) by ethephon and paraquat. *Indian Journal Of Experimental Biology* 23(1): 60-62.
- Obaseki, A. O., O. Adeyi, et al. (1985). Some serum enzyme levels as marks of possible acute effects of the aqueous extract of *Azadirachta indica* on membranes in vivo. *Fitoterapia* 56(2): 111-116.
- Obih, P. O. and J. M. Makinde (1985). Effect of *Azadirachta indica* on *Plasmodium berghei berghei* in mice. *African Journal Of Medicine And Medical Sciences* 14(1-2): 51-54.
- Podder, G. and S. B. Mahato (1985). Azadirachtanin, a new limonoid from the leaves of *Azadirachta indica*. *Heterocycles* 23(9): 2321-2326.
- Rochanakij, S., Y. Thebtaranonth, et al. (1985). Nimbolide, a constituent of *Azadirachta indica*, inhibits *Plasmodium falciparum* in culture. *Southeast Asian Journal Of Tropical Medicine And Public Health* 16(1): 66-72.
- Sakunthala, D. G. and J. D. Patel (1985). Succinate dehydrogenase and peroxidase activities in leaf epidermis and stem of some angiosperm species growing near a fertilizer complex. *Proceedings Of The Indian Academy Of Sciences Plant Sciences* 95(2): 129-138.
- Saxena, R. C. and Z. R. Khan (1985). Effect of neem oil on survival of *Nilaparvata lugens* (Homoptera: Delphacidae) and on grassy stunt and ragged stunt virus transmission. *Journal Of Economic Entomology* 78(3): 647-651.
- Sharma, H. L., O. P. Vimal, et al. (1985). Nematicidal and manurial value of some oil-cakes. *International Journal Of Tropical Plant Diseases* 3(1): 51-56.
- Shinfoon, C., Z. Xing, et al. (1985). Growth-distrupting effects of azadirachtin on the larvae of the Asiatic corn borer (*Ostrinia furnacalis*) (Lepidoptera, Pyralidae). *Zeitschrift Fuer Angewandte Entomologie* 99(3): 276-284.
- Siddiqui, S., T. Mahmood, et al. (1985). Studies in the nonterpenoidal constituents of *Azadirachta indica*. *Pakistan Journal Of Scientific And Industrial Research* 28(1): 1-4.
- Siddiqui, S., B. S. Siddiqui, et al. (1985). Studies in the chemical constituents of *Azadirachta indica*: Part II. Isolation and structure of the new triterpenoid azadirachtol. *Planta Medica*(6): 478-480.
- Sujatha, A. and K. C. Punnaiah (1985). Effect of coating stored seed of greengram (*Vigna radiata*) with vegetable oils on the development of pulse beetle (*Callosobruchus chinensis*). *Indian Journal Of Agricultural Sciences* 55(7): 475-477.
- Tewari, G. C. and M. P. N. Krishna (1985). Plant extracts as antifeedants against *Henosepilachna vigintioctopunctata* and their effect on its parasite. *Indian Journal Of Agricultural Sciences* 55(2): 120-124.
- Von, D. H. J., R. C. Saxena, et al. (1985). Effects of neem derivatives on growth and fecundity of the rice pest *Nephotettix*



virescens (Homoptera: Cicadellidae). Zeitschrift Fuer Pflanzenkrankheiten Und Pflanzenschutz 92(4): 346-354.

Adhikary, S. (1984). Results of field trials to control common insect pests of okra, *Hibiscus esculentus*, in Togo by application of crude methanolic extracts of leaves and seed kernels of the neem tree, *Azadirachta indica*. Zeitschrift Fuer Angewandte Entomologie 98(4): 327-331.

Gaaboub, I. A. and D. K. Hayes (1984). Biological activity of azadirachtin, component of the neem tree inhibiting molting in the face fly, *Musca autumnalis* (Diptera: Muscidae). Environmental Entomology 13(3): 803-812.

Hasan, N. and R. K. Jain (1984). Effect of soil amendments on fodder production, photosynthetic pigments and nematodes associated with berseem (*Trifolium alexandrinum*) followed by bajra (*Pennisetum typhoides*). Agricultural Science Digest 4(1): 12-14.

Koul, O. (1984). Azadirachtin: 2. Interaction with the reproductive behavior of red cotton bugs (*Dysdercus koenigii*). Zeitschrift Fuer Angewandte Entomologie 98(2): 221-223.

Koul, O. (1984). Azadirachtin: Insect interaction with the development of red cotton bugs (*Dysdercus koenigii*). Entomologia Experimentalis Et Applicata 36(1): 85-88.

Krishnaiah, N. V. and M. B. Kalode (1984). Evaluation of neem (*Azadirachta indica*) oil, neem cake and other non-edible oil cakes against rice pests. Indian Journal Of Plant Protection 12(2): 101-107.

Ladd, T. L. J., J. D. J. Warthen, et al. (1984). Japanese beetle (*Popillia japonica*) (Coleoptera: Scarabaeidae): The effects of azadirachtin on the growth and development of the immature forms. Journal Of Economic Entomology 77(4): 903-905.

Lange, W. and K. Feuerhake (1984). Increase of the efficacy of enriched neem (*Azadirachta indica*) seed extracts by the synergist piperonyl butoxide under laboratory conditions. Zeitschrift Fuer Angewandte Entomologie 98(4): 368-375.

Pillai, N. R. and G. Santhakumari (1984). Toxicity studies on nimbidin, a potential antiulcer drug. Planta Medica 50(2): 146-148.

Pillai, N. R. and G. Santhakumari (1984). Effects of nimbidin on acute and chronic gastro-duodenal ulcer models in experimental animals. Planta Medica 50(2): 143-146.

Reddy, M. K., C. K. Kokate, et al. (1984). Antifertility activity of crude drug combinations in albino rats: 1. Indian Drugs 21(12): 533-535.

Reghu, C. P. and J. D. Patel (1984). Distribution of starch and lipids in reaction wood of some angiosperm trees. Nordic Journal Of Botany 4(3): 357-363.

Setia, R. C. (1984). Development, structure and histochemistry of gum cavities in *Pterocarpus marsupium* and *Azadirachta indica*. Flora 175(5): 329-337.

Siddiqui, S., B. S. Siddiqui, et al. (1984). Isolation of a tetranortriterpenoid from *Azadirachta indica*. Phytochemistry 23(12): 2899-2902.

Srivastava, K. P., N. P. Agnihotri, et al. (1984). Relative efficacy of fenvalerate, quinalphos and neem (*Azadirachta indica*) kernel extracts for the control of pod fly, *Melanagromyza obtusa* and pod borer, *Heliothis armigera* infesting red gram, *Cajanus cajan* together with their residues. Journal Of Entomological Research 8(1): 1-4.

Uwaifo, A. O. (1984). Mutagenicities of 7 coumarin derivatives and alpha furan derivative (nimbolide) isolated from 3 medicinal plants. Journal Of Toxicology And Environmental Health 13(4-6): 521-530.

Bhatnagar, R. S. and K. S. Jauhri (1983). Effect of ammoniated oil cakes on nodulation and yield of soybean cultivar Ankur. Agricultural Science Digest 3(1): 33-34.

El, S. E. I. (1982). Neem (*Azadirachta indica*) seeds as antifeedant and ovipositional repellent for the Egyptian cotton leafworm *Spodoptera littoralis*. Bulletin Of The Entomological Society Of Egypt Economic Series(13): 49-58.

El, S. E. I. (1982). Evaluation of the insecticidal properties of the common Indian neem, *Azadirachta indica* seeds against the Egyptian cotton leafworm *Spodoptera littoralis*. Bulletin Of The Entomological Society Of Egypt Economic Series(13): 39-48.

Shetty, S. A., H. S. Prakash, et al. (1956). Efficacy of certain plant extracts against seed-borne infection of *Trichoconiella padwickii* in paddy (*Oryza sativa*). Canadian Journal Of Botany 67(7): 1956-1958.

Siddiqui, S., T. Mahmood, et al. (1827). Isonimolide and isolimbolide, two new tetranortriterpenoids from the twigs of *Azadirachta indica* A. Juss (Meliaceae). Heterocycles 26(7): 1827-1834.

Ara, I., B. S. Siddiqui, et al. (1801). Terpenoids from the stem bark of *Azadirachta indica*. Phytochemistry 27(6): 1801-1804.

Karel, A. K. (1799). Response of *Ootheca bennigseni* (Coleoptera: Chrysomelidae) to extracts from Neem. Journal Of Economic

Entomology 82(6): 1799-1803.

Siddiqui, S., B. S. Siddiqui, et al. (1615). Terpenoids from fruit coatings of *Azadirachta indica*. *Phytochemistry* 30(5): 1615-1620.

Burnell, R. H. and S. Caron (1446). Approach to the synthesis of candelabrone and synthesis of 3,7-diketo-12-hydroxyabieta-8,11,13-triene. *Canadian Journal Of Chemistry* 70(5): 1446-1454.

Siddiqui, S., T. Mahmood, et al. (1429). Studies in the chemical constituents of *Azadirachta indica* A. Juss (Meliaceae): Part 10. Isolation and structure elucidation of isonimolicinolide, the first 17-acetoxytetranortriterpenoid and nimolicinoic acid, the first hexanortriterpenoid with an apoeuphane (apotirucallane) skeleton. *Journal Of The Chemical Society Perkin Transactions I*(7): 1429-1432.

Das, K., U. C. Sinha, et al. (1426). Structure of 17-epinimbocinol. *Acta Crystallographica Section C Crystal Structure Communications* 47(7): 1426-1429.

Isman, M. B., O. Koul, et al. (1406). Insecticidal and antifeedant bioactivities of neem oils and their relationship to azadirachtin content. *Journal Of Agricultural And Food Chemistry* 38(6): 1406-1411.

Miller, J. A. and W. F. Chamberlain (1375). Azadirachtin as a larvicide against the horn fly, stable fly and house fly (Diptera: Muscidae). *Journal Of Economic Entomology* 82(5): 1375-1378.

Mariappan, V., S. Jayaraj, et al. (1369). Effect of nonedible seed oils on survival of *Nephotettix virescens* (Homoptera: Cicadellidae) and on transmission of rice tungro virus. *Journal Of Economic Entomology* 81(5): 1369-1372.

Rao, P. U. (1348). Chemical composition and biological evaluation of debitterized and defatted neem (*Azadirachta indica*) seed kernel cake. *Journal Of The American Oil Chemists' Society* 64(9): 1348-1351.

Siddiqui, S., S. Faizi, et al. (1319). Isolation of a new tetranortriterpenoid from *Azadirachta indica* (Meliaceae). *Heterocycles* 24(5): 1319-1324.

Upadhyay, S. N., C. Kaushic, et al. (1305). Antifertility effects of neem (*Azadirachta indica*) oil by single intrauterine administration: A novel method for contraception. *Proceedings Of The Royal Society Of London Series B Biological Sciences* 242(1305): 175-180.

Ara, I., B. S. Siddiqui, et al. (1279). Diterpenoids from the root bark of *Azadirachta indica*. *Zeitschrift Fuer Naturforschung Section B Chemical Sciences* 44(10): 1279-1282.

Kigodi, P. G. K., G. Blasko, et al. (1246). Spectroscopic and biological investigation of nimbolide and 28-deoxonimbolide from *Azadirachta indica*. *Journal Of Natural Products* 52(6): 1246-1251.

Jilani, G., R. C. Saxena, et al. (1226). Repellent and growth-inhibiting effects of turmeric oil, sweetflag oil, neem oil, and "Margosan-O" on red flour beetle (Coleoptera: Tenebrionidae). *Journal Of Economic Entomology* 81(4): 1226-1230.

Ara, I., B. S. Siddiqui, et al. (1209). Two new terpenoids from root bark of *Azadirachta indica*. *Journal Of Natural Products* 52(6): 1209-1213.

Upadhyay, S. N., S. Dhawan, et al. (1187). Immunomodulatory effects of neem (*Azadirachta indica*) oil. *International Journal Of Immunopharmacology* 14(7): 1187-1193.

Ara, I., B. S. Siddiqui, et al. (1177). Diterpenoids from the stem bark of *Azadirachta Indica*. *Phytochemistry* 28(4): 1177-1180.

Bhatnagar, D. and S. P. McCormick (1166). The inhibitory effect of neem (*Azadirachta indica*) leaf extracts on aflatoxin synthesis in *Aspergillus parasiticus*. *Journal Of The American Oil Chemists' Society* 65(7): 1166-1168.

Lee, S. M. and J. A. Klocke (1151). Combined florisil, droplet countercurrent, and high performance liquid chromatographies for preparative isolation and purification of azadirachtin from neem (*Azadirachta indica*) seeds. *Journal Of Liquid Chromatography* 10(6): 1151-1164.

Devakumar, C. and S. K. Mukerjee (1105). 4-Epinimbin, a new meliacin from *Azadirachta indica*. *Indian Journal Of Chemistry Section B Organic Chemistry Including Medicinal Chemistry* 24(11): 1105-1106.

Madhusudanan, K. P., R. Chaturvedi, et al. (1082). Negative ion mass spectra of tetranortriterpenoids isolated from neem (*Azadirachta indica*). *Indian Journal Of Chemistry Section B Organic Chemistry Including Medicinal Chemistry* 23(11): 1082-1087.

Saxena, R. C., Z. R. Khan, et al. (1079). Reduction of tungro virus transmission by *Nephotettix virescens* (Homoptera: Cicadellidae) in Neem cake-treated rice seedlings. *Journal Of Economic Entomology* 80(5): 1079-1082.

Siddiqui, S., T. Mahmood, et al. (1068). Two new tetranortriterpenoids from *Azadirachta indica*. *Journal Of Natural Products* 49(6): 1068-1073.

Ara, I., B. S. Siddiqui, et al. (1054). Tricyclic diterpenoids from the stem bark of *Azadirachta indica*. *Journal Of Natural Products* 51(6): 1054-1061.

Balandrin, M. F., S. M. Lee, et al. (1048). Biologically active volatile organosulfur compounds from seeds of the neem tree, *Azadirachta indica* (Meliaceae). *Journal Of Agricultural And Food Chemistry* 36(5): 1048-1054.

Siddiqui, S., S. Faizi, et al. (1021). Two new insect growth regulator meliacins from *Azadirachta indica* (Meliaceae). *Journal Of The Chemical Society Perkin Transactions I*(6): 1021-1026.

Arjunan, M. C. and N. R. Ponnammal Studies on phenology and nursery technology of certain tree species. *Indian Botanical Contactor* 10(3-4): 147-150. Dep. Botany, Kongunadu Arts and Sci. Coll., Coimbatore 641 029, India

Jain, R. K. and D. S. Bhatti Evaluation of the effective integrated methods for the control of root knot nematode (*Meloidogyne javanica*) in tomato. *Indian Journal of Nematology* 21(2): 107-112. Dep. Nematol., Haryana Agric. Univ., Hisar 125004, Haryana, India

Nair, M. N. B. Wood anatomy of some members of the Meliaceae. *Phytomorphology* 41(1-2): 63-73. Dep. Botany, Univ. Delhi, Delhi-110007, India

Naqvi, S. N. H., K. Akhtar, et al. Toxicity of NfD against *Sitophilus oryzae* L. exposed to impregnated filter paper and its effect on phosphatases and protein metabolites. *Acta Biologica Cracoviensia Series Zoologia* 33: 49-58. Dep. Zoology, University Karachi, Karachi-32, Pakistan

Ramshe, D. G., K. K. Khade, et al. Effects of tree species on grain production of associated field crops. *Journal of Maharashtra Agricultural Universities* 20(2): 220-223. Mahatma Phule Krishi Vidyapeeth, Rahuri-413 722, India

#### Index of botanical names:

[\[A\]](#) [\[B\]](#) [\[C\]](#) [\[D\]](#) [\[E\]](#) [\[F\]](#) [\[G\]](#) [\[H\]](#) [\[I\]](#) [\[J\]](#) [\[K\]](#) [\[L\]](#) [\[M\]](#)  
[\[N\]](#) [\[O\]](#) [\[P\]](#) [\[Q\]](#) [\[R\]](#) [\[S\]](#) [\[T\]](#) [\[U\]](#) [\[V\]](#) [\[W\]](#) [\[X\]](#) [\[Y\]](#) [\[Z\]](#)

#### Index of common names:

[\[A\]](#) [\[B\]](#) [\[C\]](#) [\[D\]](#) [\[E\]](#) [\[F\]](#) [\[G\]](#) [\[H\]](#) [\[I\]](#) [\[J\]](#) [\[K\]](#) [\[L\]](#) [\[M\]](#)  
[\[N\]](#) [\[O\]](#) [\[P\]](#) [\[Q\]](#) [\[R\]](#) [\[S\]](#) [\[T\]](#) [\[U\]](#) [\[V\]](#) [\[W\]](#) [\[X\]](#) [\[Y\]](#) [\[Z\]](#)

*All information is included in good faith but The University of Queensland does not warrant or guarantee the accuracy of any information on these pages, nor does it accept responsibilities for any loss arising from the use of this information. Views and opinions do not represent those of the University of Queensland.*

Contact: Dr Rob Fletcher, School of Agriculture and Horticulture, The University of Queensland, Gatton 4343; Telephone: 07 5460 1311 or 07 5460 1301; Facsimile: 07 5460 1112; International facsimile: 61 7 5460 1112; Email: [r.fletcher@mailbox.uq.edu.au](mailto:r.fletcher@mailbox.uq.edu.au)

[\[New Crops Home Page\]](#) [\[New Crops Program\]](#) [\[Australian New Crops \(Periodical\)\]](#) [\[New Crops Publications\]](#) [\[Order Form\]](#) [\[People\]](#) [\[Crop Profiles\]](#) [\[Other Resources\]](#)

Latest update 30 January 2001 by: [RF](#)