

PROF.RAGHAVENDRA GADAGKAR
CENTRE FOR ECOLOGICAL SCIENCES, INDIAN INSTITUTE OF SCIENCE
BANGALORE 560 012, INDIA.

Telephone: (91-80) 23601429 or 22932340; FAX: 91-80-23601428

E-Mail: ragh@iisc.ac.in; URL: <http://ces.iisc.ac.in/hpg/ragh>

(Updated on 5 March 2018)

You may obtain copies of any of the following publications by writing to the address above.

- (1) **Gadagkar, R.** (1980). Dominance hierarchy and division of labour in the social wasp, *Ropalidia marginata* (Lep.) (Hymenoptera: Vespidae). *Current Science*, 49, 772-775.
- (2) **Gadagkar, R.** and Joshi, N.V. (1982). Behaviour of the Indian social wasp *Ropalidia cyathiformis* on a nest of separate combs (Hymenoptera: Vespidae). *Journal of Zoological Society, London*, 198, 27-37.
- (3) **Gadagkar, R.** and Joshi,N.V. (1982). A Comparative Study of Social Structure in Colonies of *Ropalidia*. In: *The Biology of Social Insects*, (Eds.) M.D.Breed, C.D.Michener & H.E.Evans. *Proceedings of the Ninth Congress of the International Union for the Study of Social Insects*, Boulder, Colorado, August 1982, Westview press, Boulder, Colorado, pp.187-191.
- (4) **Gadagkar, R.**, Gadgil, M., Joshi, N.V. and Mahabal, A.S. (1982). Observations on the natural history and population ecology of the social wasp *Ropalidia marginata* (Lep.) from peninsular India (Hymenoptera: Vespidae). *Proceedings of the Indian Academy of Sciences (Animal Sciences)*, 91, 539-552.
- (5) **Gadagkar, R.** and Joshi, N.V. (1983). Quantitative ethology of social wasps : Time-activity budgets and caste differentiation in *Ropalidia marginata* (Lep.) (Hymenoptera: Vespidae). *Animal Behaviour*, 31, 26-31.
- (6) **Gadagkar, R.** and Joshi, N.V. (1984). Social Organisation in the Indian Wasp *Ropalidia cyathiformis* (Fab.) (Hymenoptera: Vespidae). *Zeitschrift Tierpsychol*, 64, 15-32.
- (7) **Gadagkar, R.** and Joshi, N.V. (1985). Colony fission in a social wasp. *Current Science*, 54, 57-62.
- (8) **Gadagkar, R.** (1985). Evolution of insect sociality - A review of some attempts to test modern theories. *Proceedings of the Indian Academy of Sciences (Animal Sciences)*, 94, 309-324.
- (9) **Gadagkar, R.** (1985). Kin recognition in social insects and other animals - A review of recent findings and a consideration of their relevance for the theory of kin selection. *Proceedings of the Indian Academy of Sciences (Animal Sciences)*, 94, 587-621.
- (10) Joshi, N.V. and **Gadagkar, R.** (1985). Evolution of sex ratios in social hymenoptera: kin selection, local mate competition, polyandry and kin recognition. *Journal of Genetics*, 64, 41-58.

- (11) Muralidharan, K., Shaila, M.S. and **Gadagkar, R.** (1986). Evidence for multiple mating in the primitively eusocial wasp *Ropalidia marginata* (Lep.) (Hymenoptera:Vespidae). *Journal of Genetics*, 65, 153-158.
- (12) **Gadagkar, R.** (1987). Social Structure and the Determinants of Queen Status in the Primitively Eusocial Wasp *Ropalidia cyathiformis*. In: *Chemistry and Biology of Social Insects*. Proceedings of X International Congress IUSSI, Munich (Eds. J. Eder & H. Rembold), Verlag J Peperny, Munich, pp. 377-378.
- (13) **Gadagkar, R.**, Vinutha, C., Shanubhogue, A. and Gore, A.P. (1988). Pre-imaginal biasing of caste in a primitively eusocial insect. *Proceedings of the Royal Society of London B.*, 233, 175-189.
- (14) **Gadagkar, R.** and Gadagkar, V. R. (1988). The Amazing World of the Honey Bees. *Vijnana Parichaya*, 10 (3), 4-8.
- (15) Venkataraman, A.B., Swarnalatha, V.B., Nair, P. and **Gadagkar, R.** (1988). The mechanism of nestmate discrimination in the tropical social wasp *Ropalidia marginata* and its implications for the evolution of sociality. *Behavioral Ecology and Sociobiology*, 23, 271-279.
- (16) **Gadagkar, R.** (1988). Review of *Semiochemistry: Flavours and pheromones*. Proceedings of the American Chemical Society Symposium Washington, D.C. USA, (Eds.) T.E. Acree & D.M. Soderlund, Walde de Gruyter, Berlin, New York, (1985). *The Journal of the Indian Institute of Science*, 68, 72-76
- (17) **Gadagkar, R.** (1989). An undesirable property of Hill's diversity index N_2 . *Oecologia*, 80, 140-141.
- (18) **Gadagkar, R.** (1990). Evolution of insect societies : Some insights from studying tropical wasps. In: *Social Insects : An Indian Perspective*. (Eds.) G.K. Veeresh, A.R.V. Kumar & T.Shivashankar, IUSSI - Indian Chapter, Bangalore, pp. 129 - 152.
- (19) Chandrashekara, K. and **Gadagkar, R.** (1990). Behavioural castes and their correlates in the primitively eusocial wasp, *Ropalidia marginata* (Lep.) (Hymenoptera:Vespidae). In : *Social Insects : An Indian Perspective*. (Eds.) G.K. Veeresh, A.R.V. Kumar & T.Shivashankar, IUSSI-Indian Chapter, Bangalore, pp. 153 - 160.
- (20) Venkataraman, A.B., Swarnalatha, V.B., Nair, P., Vinutha, C. and **Gadagkar, R.** (1990). Nestmate discrimination in the social wasp *Ropalidia marginata* . In: *Social Insects : An Indian Perspective*. (Eds.) G.K. Veeresh, A.R.V.Kumar & T. Shivashankar, IUSSI - Indian Chapter, Bangalore, pp. 161 - 171.
- (21) **Gadagkar, R.** (1990). Social biology of *Ropalidia*: Investigations into the origins of eusociality. In: *Social Insects and the Environment*. (Eds.) G.K. Veeresh, B. Mallik, C.A. Viraktamath, *Proceedings of the 11th International Congress of IUSSI*, Bangalore, India, August, 1990, Oxford & IBH Publishing Co., New Delhi. pp. 9 - 11.

- (22) Venkataraman, A.B. and **Gadagkar, R.** (1990). Evolution of Eusociality: Lessons from the mechanism of nestmate discrimination in the primitively eusocial wasp *Ropalidia marginata*. In: *Social Insects and the Environment*. (Eds.) G.K. Veeresh, B. Mallik, C.A. Viraktamath, *Proceedings of 11th International Congress of IUSSI*, Bangalore, India, August, 1990, Oxford & IBH Publishing Co., New Delhi. pp. 71- 72.
- (23) Chandrashekara, K. and **Gadagkar, R.** (1990). Evolution of eusociality: Lessons from social organization in *Ropalidia marginata* (Lep.) (Hymenoptera: Vespidae). In: *Social Insects and the Environment*. (Eds.) G.K. Veeresh, B. Mallik, C.A. Viraktamath. Proceedings of 11th International Congress of IUSSI, Bangalore, India, August, 1990, Oxford & IBH Publishing Co., New Delhi, pp.73 - 74.
- (24) Chandran, S. and **Gadagkar, R.** (1990). Social organisation in laboratory colonies of *Ropalidia marginata*. In : *Social Insects and the Environment*. (Eds.) G.K. Veeresh, B. Mallik, C.A. Viraktamath. Proceedings of 11th International Congress of IUSSI, Bangalore, India, August, 1990, Oxford & IBH Publishing Co., New Delhi. p. 78.
- (25) Nair, P., Bose, P. and **Gadagkar, R.** (1990). The determinants of dominance in a primitively eusocial wasp. In: *Social Insects and the Environment*. (Eds.) G.K.Veeresh, B. Mallik, C.A. Viraktamath. Proceedings of 11th International Congress of IUSSI, Bangalore, India, August, 1990, Oxford & IBH Publishing Co., New Delhi. p. 79.
- (26) Premnath, S., Chandrashekara, K., Chandran, S. and **Gadagkar, R.** (1990). Constructing Dominance hierarchies in a primitively eusocial wasp. In: *Social Insects and the Environment*. (Eds.) G.K. Veeresh, B. Mallik, C.A. Viraktamath. *Proceedings of 11th International Congress of IUSSI*, Bangalore, India, August, 1990, Oxford & IBH Publishing Co., New Delhi. p. 80.
- (27) Chandrashekara, K., Bhagavan, S., Chandran, S., Nair, P. and **Gadagkar, R.** (1990). Perennial indeterminate colony cycle in a primitively eusocial wasp. In: *Social Insects and the Environment*. (Eds.) G.K.Veeresh, B. Mallik, C.A.Viraktamath. *Proceedings of 11th International Congress of IUSSI*, Bangalore, India, August, 1990, Oxford & IBH Publishing Co., New Delhi. p. 81.
- (28) **Gadagkar, R.**, Chandrashekara, K., Chandran, S. and Bhagavan, S. (1990). Serial polygyny in *Ropalidia marginata* : Implications for the evolution of eusociality. In: *Social Insects and the Environment*. (Eds.) G.K. Veeresh, B. Mallik, C.A. Viraktamath. *Proceedings of 11th International Congress of IUSSI*, Bangalore, India, August, 1990, Oxford & IBH Publishing Co., New Delhi. pp. 227 - 228.
- (29) **Gadagkar, R.** (1990). A test of the role of haplodiploidy in the evolution of Hymenopteran eusociality. In : *Social Insects and the Environment*. (Eds.) G.K. Veeresh, B. Mallik, C.A. Viraktamath. Proceedings of 11th International Congress of IUSSI, Bangalore, India, August, 1990, Oxford & IBH Publishing Co., New Delhi. pp. 539 - 540.

- (30) **Gadagkar, R.**, Bhagavan, S., Malpe, R. and Vinutha, C. 1990). On reconfirming the evidence for pre-imaginal caste bias in a primitively eusocial wasp. *Proceedings of the Indian Academy of Sciences (Animal Sciences)*, 99, 141-150.
- (31) **Gadagkar, R.** (1990). The haplodiploidy threshold and social evolution. *Current Science*, 59, 374-376.
- (32) **Gadagkar, R.**, and Venkataraman, A.B. (1990). Nepotistic bee-eaters. *Current Science*, 59, 445-446.
- (33) **Gadagkar, R.** (1990). Evolution of eusociality : the advantage of assured fitness returns. *Philosophical Transactions of the Royal Society London B*, 329, 17-25.
- (34) **Gadagkar, R.** (1990). Origin and evolution of eusociality: A perspective from studying primitively eusocial wasps. *Journal of Genetics*, 69, 113-125.
- (35) **Gadagkar, R.** (1990). Genetic Diversity and Evolution. In: *Proc. MAB Regional Training Workshop Tropical Forest Ecosystem Conservation Development, S & S E Asia*. (Eds.) K.K.N.Nair, K.V.Bhat, J.K.Sharma & K.Swarupanandan. Kerala Forest Research Institute, Peechi, Kerala, pp.3-16.
- (36) **Gadagkar, R.**, Chandrashekara, K. and Nair, P. (1990). Insect species diversity in tropics: Sampling methods and a case study. *Journal of the Bombay Natural History Society*, 87, 337-353.
- (37) Chandrashekara, K. and **Gadagkar, R.** (1991). Behavioural Castes, Dominance and Division of Labour in a Primitively Eusocial Wasp. *Ethology*, 87, 269-283.
- (38) **Gadagkar, R.** (1991). On testing the role of genetic asymmetries created by haplodiploidy in the evolution of eusociality in the Hymenoptera. *Journal of Genetics*, 70, 1-31.
- (39) **Gadagkar, R.** (1991). *Belonogaster*, *Mischocyttarus*, *Parapolybia*, and Independent-founding *Ropalidia*. In: *The Social Biology of wasps*. (Eds.) K.G. Ross and R.W. Matthews, Cornell University Press, Ithaca, New York, pp.149-190.
- (40) Chandrashekara, K. and **Gadagkar, R.** (1991). Unmated Queens in the primitively eusocial wasp *Ropalidia marginata* (Lep.) (Hymenoptera: Vespidae). *Insectes Sociaux*, 38, 213-216.
- (41) **Gadagkar, R.**, Bhagavan, S., Malpe, R. and Vinutha, C. (1991). Seasonal variation in the onset of egg laying in a primitively eusocial wasp : Implications for the evolution of sociality. *Entomon*, 16, 167-174.
- (42) **Gadagkar, R.**, Bhagavan, S., Chandrashekara, K., and Vinutha, C. (1991). The role of larval nutrition in pre-imaginal biasing of caste in the primitively eusocial wasp *Ropalidia marginata* (Hymenoptera: Vespidae)(Lep.). *Ecological Entomology*, 16, 435-440.

- (43) **Gadagkar, R.**, Chandrashekara, K., Chandran, S. and Bhagavan, S. (1991). Worker-Brood Genetic Relatedness in a Primitively Eusocial Wasp - a pedigree analysis. *Naturwissenschaften*, 78, 523-526.
- (44) **Gadagkar, R.** (1991). Demographic predisposition to the evolution of eusociality - A hierarchy of models. *Proceedings of the National Academy of Sciences, U.S.A.*, 88, 10993-10997.
- (45) **Gadagkar, R.** (1991). More gene wars. *Current Science*, 61, p.441. (Scientific Correspondence).
- (46) **Gadagkar, R.** (1992). New agenda for social insect research: A Review of Success and Dominance in Ecosystems : The Case of the Social Insects by E.O.Wilson, Ecology Institute, Germany. *Current Science*, 62, 317-318.
- (47) **Gadagkar, R.** (1992). When fathers harass their sons. *Down to Earth*, 1(8), 47-48.
- (48) **Gadagkar, R.** (1992). Disease and social evolution. *Current Science*, 63, 285-286.
- (49) **Gadagkar, R.** (1992). World's biodiversity needs to be preserved. *Down to Earth*, 1(11), 43-44.
- (50) Chandrashekara, K. and **Gadagkar, R.** (1992). Queen Succession in the Primitively Eusocial Tropical Wasp *Ropalidia marginata* (Lep.) (Hymenoptera : Vespidae). *Journal of Insect Behavior*, 5, 193-209.
- (51) Venkataraman, A. and **Gadagkar, R.** (1992). Kin recognition in a semi-natural context: Behaviour towards foreign conspecifics in the social wasp *Ropalidia marginata* (Lep.) (Hymenoptera: Vespidae). *Insectes Sociaux*, 39, 285-299.
- (52) **Gadagkar, R.** (1987). What are Social Insects? IUSSI Indian Chapter, Newsletter 1(2), 3-4.
- (53) **Gadagkar, R.** (1988). Kin recognition in social insects. IUSSI Indian Chapter, Newsletter 2(1), 4-5.
- (54) **Gadagkar, R.** (1988). The Genetic Basis of Behaviour. IUSSI Indian Chapter, Newsletter 2(2), 4-5.
- (55) **Gadagkar, R.** (1992). Growing old in the wild. *Down to Earth*, 1(15), 46-47.
- (56) **Gadagkar, R.** (1993). And now..... eusocial thrips! *Current Science*, 64, 215-216.
- (57) **Gadagkar, R.** (1993). Persistence helps masquerading ant raiders. *Down to Earth*, 1(20), p.45.
- (58) Venkataraman, A.B. and **Gadagkar, R.** (1993). Differential aggression towards alien conspecifics in a primitively eusocial wasp. *Current Science*, 64, 601-603.

- (59) Sinha, A., Premnath, S., Chandrashekara, K. and **Gadagkar, R.** (1993). *Ropalidia rufoplagiata* : a polistine wasp society probably lacking permanent reproductive division of labour. *Insectes Sociaux*, 40, 69-86.
- (60) **Gadagkar, R.** (1993). Can Animals be Spiteful? *Trends in Ecology and Evolution*, 8, 232-234.
- (61) **Gadagkar, R.** (1993). Bed and breakfast available, only for a year. *Down to Earth*, 2(3), 46-47.
- (62) **Gadagkar, R.** (1992). "What is Life"? – Reconsidered - A Review of - *The Origins of Life* by Freeman Dyson, Cambridge University Press, Cambridge. *Bulletin of Sciences*, 6(4) 44-45.
- (63) **Gadagkar, R.** (1993). Western scientists set the trends. *Down to Earth*, 2(7), 45-46.
- (64) **Gadagkar, R.**, Chandrashekara, K., Chandran, S. and Bhagavan, S. (1993). Queen success is correlated with worker-brood genetic relatedness in a primitively eusocial wasp (*Ropalidia marginata*). *Experientia*, 49, 714-717.
- (65) **Gadagkar, R.**, Chandrashekara, K., Chandran, S., and Bhagavan, S. (1993). Serial polygyny in the primitively eusocial wasp *Ropalidia marginata* : implications for the evolution of sociality. In: *Queen Number and Sociality in Insects*. (Ed. L.Keller), Oxford University press, Oxford, pp.188-214
- (66) **Gadagkar, R.**, Nair, P., Chandrashekara, K. and Bhat, D.M. (1993). Ant species richness and diversity in some selected localities of Western Ghats, India. *Hexapoda*, 5, 79-94.
- (67) **Gadagkar, R.** (1994). The Evolution of Altruism in Insects - A Case Study. In: *Perspectives in Entomological Research* (Ed. O.P. Agarwal). Scientific Publishers, Jodhpur, pp. 263-275.
- (68) **Gadagkar, R.** (1994). Spiteful animals still to be discovered - a reply to Keller et al *Trends in Ecology & Evolution*, 9, p.103.
- (69) **Gadagkar, R.**, and Bonner, J.T. (1994). Social insects and social amoebae. *J.Biosciences*, 19, 219-245.
- (70) **Gadagkar, R.** (1994). The Evolution of Eusociality. In: *Les Insectes Sociaux* (Eds.) A.Lenoir, G.Arnold and M.Lepage. *Proceedings of the 12th Congress of the International Union for the Study of Social Insects IUSSI*, Paris, Sorbonne 21-27th August 1994, Universite Paris Nord, pp. 10-12.
- (71) Premnath, S., Sinha, A. and **Gadagkar, R.** (1994). Dominance behaviour and the resolution of intra-colonial conflicts in the primitively eusocial wasp, *Ropalidia marginata*. In: *Les Insectes Sociaux* (Eds.) A.Lenoir, G.Arnold and M.Lepage. *Proceedings of the 12th Congress of the International Union for the Study of Social Insects IUSSI*, Paris, Sorbonne 21- 27th August 1994, Universite Paris Nord, p. 242.
- (72) **Gadagkar, R.** (1993). My Vacation with *Apis mellifera*. *IUSSI Indian Chapter, Newsletter*, 7 (1,2), 3-4.

- (73) **Gadagkar, R.** (1993). A Review of – *Chemical Ecology of Phytophagous Insects* (Eds.) T.N.Ananthakrishnan & A.Raman, Oxford and IBH Publishing Co.Pvt.Ltd, New Delhi. *Phytophaga*, 5, 135-137.
- (74) **Gadagkar, R.** (1994). Why the definition of eusociality is not helpful to understand its evolution and what should we do about it. *Oikos*, 70, 485-488.
- (75) Kirchner, W.H. and **Gadagkar, R.** (1994). Discrimination of nestmate workers and drones in honeybees. *Insectes Sociaux*, 41, 335-338.
- (76) **Gadagkar, R.** (1994). Social Insect Buffs Swarm in Paris and decide to go to Adelaide. *IUSSI Indian Chapter, Newsletter*, 8 (1,2), 4-5.
- (77) **Gadagkar, R.** (1995). Observational study of animal behaviour: From instinct to intelligence. *Current Science*, 68, 185-196.
- (78) Lehrer, M., Horridge, G.A., Zhang, S.W. and **Gadagkar, R.** (1995). Shape vision in bees: innate preference for flower-like patterns. *Philosophical Transactions of the Royal Society London*, 347, 123-137.
- (79) **Gadagkar, R.** (1994). A Review of - *The Natural History of Inbreeding and Outbreeding : Theoretical and Empirical Perspectives* (Ed.) N.W.Thornhill. The University of Chicago Press, Chicago (1993). *Tropical Ecology*, 35, 349-352.
- (80) **Gadagkar, R.** (1994). A Review of - *Behaviour and Social Evolution of Wasps : The Communal Aggregation Hypothesis*. Yosiaki Itô, (Eds.) R.M.May and P.H.Harvey. Oxford University Press, Oxford (1993). *The Quarterly Review of Biology*, 69, 558-559.
- (81) **Gadagkar, R.** and Arathi, H.S. (1995). Complex domestic conflicts in a bird family. *Current Science*, 68, 676-677.
- (82) Premnath, S., Sinha, A. and **Gadagkar, R.** (1995). Regulation of worker activity in a primitively eusocial wasp, *Ropalidia marginata*. *Behavioral Ecology*, 6, 117-123.
- (83) **Gadagkar, R.** (1995). Biodiversity - Challenges and Opportunities. *Proceedings of the Seminar on United Nations for a Better World, held on the occasion of the Fiftieth Anniversary of United Nations, Sponsored by Kengal Hanumanthaiya Foundation, Bangalore, June 26th – 28th, 1995*.
- (84) **Gadagkar, R.** (1995). Can animals count ? *Current Science*, 68, 1180-1182.
- (85) **Gadagkar, R.** (1995). Honey, I got the bees right! *Times of India*, July 18.
- (86) Venkataraman, A. B. and **Gadagkar, R.** (1995). Age-Specific Acceptance of Unrelated Conspecifics on Nests of the Primitively Eusocial Wasp *Ropalidia marginata*. *Proceedings of the Indian National Science Academy*, B61, 299-314.
- (87) Shakarad, M. and **Gadagkar, R.** (1995). Colony founding in the primitively eusocial wasp, *Ropalidia marginata* (Hymenoptera: Vespidae). *Ecological Entomology*, 20, 273- 282.

- (88) **Gadagkar, R.** (1995). Cooperation and conflict in an insect society. *The Journal of the Indian Institute of Science*, 75, 333-352.
- (89) **Gadagkar, R.** (1996). Complex behaviour in Social Wasps - Towards a scientific study. In: *Readings in Behaviour*, (Eds.) R. Ramamurthi & Geethabali, New Age International Limited, New Delhi, pp.135-144.
- (90) **Gadagkar, R.** (1996). The Pains and Pleasures of doing Ethology in India. In: *Readings in Behaviour*, (Eds.) R.Ramamurthi & Geethabali, New Age International Limited, New Delhi, pp.1-13.
- (91) Arathi, H.S. and **Gadagkar, R.** (1996). Can genetically unrelated individuals join colonies of *Ropalidia marginata*? In: *Readings in Behaviour*, (Eds.) R.Ramamurthi & Geethabali, New Age International Limited, New Delhi, pp.153-159.
- (92) Shakarad, M. and **Gadagkar, R.** (!996). Why are there multiple-foundress colonies in *Ropalidia marginata*? In: *Readings in Behaviour*, (Eds.) R.Ramamurthi & Geethabali, New Age International Limited, New Delhi, pp.145-152.
- (93) Premnath, S., Sinha, A. and **Gadagkar, R.** (1996). How is colony activity regulated in *Ropalidia marginata*? In: *Readings in Behaviour*, (Eds.) R.Ramamurthi & Geethabali, New Age International Limited, New Delhi, pp.160-167.
- (94) **Gadagkar,R.** (1996). The Honeybee Dance-Language Controversy - Robot Bee Comes to the Rescue. *Resonance - journal of science education*, 1 (1), 63-70.
- (95) **Gadagkar, R.** (1996). Africans in the Americas: A Problem? A Cool Objective Assessment of the Killer Bee Problem - A Review of - *Killer Bees - The Africanized Honey Bee in the Americas* by Mark L.Winston, Harvard University Press, Cambridge, Massachusetts (1992). *Resonance - journal of science education*, 1 (2), 117-119.
- (96) **Gadagkar, R.** and Kolatkar, M. (1996). Evidence for Avian Mafia! *Current Science*, 70, 115-117.
- (97) Geetha, L. and **Gadagkar, R.** (1996). How does a fungus know the time of day? *Current Science*, 70, 419-421.
- (98) Chandrashekara, K. and **Gadagkar, R.** (1995). A Review of - *Functional Dynamics of Phytophagous Insects* (Ed.) T.N. Ananthakrishnan, Oxford and IBH, New Delhi (1994). *Current Science*, 69, 470-471.
- (99) **Gadagkar, R.** (1996). Exploring Japan ecologically. *Down to Earth*, 4 (22), 22-23.
- (100) **Gadagkar, R.** (1996). The evolution of eusociality, including a review of the social status of *Ropalidia marginata*. In: *Natural History and Evolution of Paper-Wasps*, (Eds.) S.Turillazzi & M.J.West-Eberhard, Oxford University Press, Oxford, pp. 248-271.

- (101) **Gadagkar, R.** (1996). Molecular Techniques in the study of Organismic Biology - Challenges and Opportunities. In: *Biotechnological Perspectives in Chemical Ecology of Insects*. (Ed.) T.N.Ananthakrishnan, Oxford and IBH Publishing Co. Pvt.Ltd, New Delhi, pp.265-274.
- (102) **Gadagkar, R.** (1996). The Making of a Scientist - A Life Worthy of Admiration and Imitation. A Review of - *Naturalist* by E.O.Wilson, Island Press/Shearwater Books, Washington D.C. (1994). *Resonance - journal of science education*, 1 (4), 87-89.
- (103) **Gadagkar, R.** (1995). Conservation Pays... *Down to Earth*, December 15, 46-47.
- (104) **Gadagkar, R.** (1996). A Review of - *The coevolutionary process* by John N.Thompson, The University of Chicago Press, Chicago and London (1994). *Tropical Ecology*, 37, 147-148.
- (105) Premnath, S., Sinha, A. and **Gadagkar, R.** (1996). Dominance relationship in the establishment of reproductive division of labour in a primitively eusocial wasp (*Ropalidia marginata*). *Behavioral Ecology and Sociobiology*, 39, 125-132.
- (106) **Gadagkar, R.** and Kolatkar, M. (1996). Evidence for Bird Mafia! Threat Pays. *Resonance - journal of science education*, 1 (5), 82-84.
- (107) **Gadagkar, R.** (1996). Konrad Lorenz - father to ethology and mother to ducks, geese, jackdaws, salamanders, fish and many more! *Resonance - journal of science education*, 1 (6), 2-3.
- (108) **Gadagkar, R.** (1996). Sharing the blame. *Down to Earth*, 24-26.
- (109) **Gadagkar, R.** (1996). What's the essence of royalty - one keto group? *Current Science*, 71, 975-980.
- (110) Shakarad, M. and **Gadagkar, R.** (1997). Do Social Wasps Choose Nesting Strategies Based on Their Brood Rearing Abilities? *Naturwissenschaften*, 84, 79-82.
- (111) Rastogi, N., Nair, P., Kolatkar, M., William, H. and **Gadagkar, R.** (1997). Ant fauna of the Indian Institute of Science Campus - Survey and some preliminary observations. *The Journal of the Indian Institute of Science*, 77, 133-140.
- (112) **Gadagkar, R.** (1997). Social evolution - has nature ever rewound the tape ? *Current Science*, 72, 950-956.
- (113) Arathi, H.S., Shakarad, M. and **Gadagkar, R.** (1997). Social organisation in experimentally assembled colonies of *Ropalidia marginata*: comparison of introduced and natal wasps. *Insectes Sociaux*, 44, 139-146.
- (114) Arathi, H.S., Shakarad, M. and **Gadagkar, R.** (1997). Factors Affecting the Acceptance of Alien Conspecifics on Nests of the Primitively Eusocial Wasp, *Ropalidia marginata*. (Hymenoptera: Vespidae). *Journal of Insect Behaviour*, 10, 343-353.

- (115) Sunil Kumar, M., Srihari, K.T., Nair, P., Varghese, T. and **Gadagkar, R.** (1997). Ant Species Richness at selected localities of Bangalore. *Insect Environment*, 3, 3-5.
- (116) **Gadagkar, R.** (1997). The evolution of communication and the communication of evolution: The case of the honey bee queen pheromone. In: *Orientation and Communication in Arthropods* (Ed.) Miriam Lehrer, Birkhauser Verlag, Basel, pp.375-395.
- (117) Rastogi, N., Nair, P., Kolatkar, M. and **Gadagkar, R.** (1997). Foraging Strategies in the Ants *Myrmicaria brunnea* and *Diacamma ceylonense* - Some Preliminary Observations. *Entomon*, 22(1), 79-81.
- (118) **Gadagkar, R.** (1998). Biology in the 21st century – back to stamp collection? Scampus – A bi-annual from IISc. SPRING 98, p.5.
- (119) **Gadagkar, R.** (1998). The language of diversity. A Review of - *The Evolution of Social Behavior in Insects and Arachnids* and A Review of - *The Evolution of Mating Systems in Insects and Arachnids* (Eds.) J.C.Choi & B.J.Crespi, Cambridge University Press (1997). *Trends in Ecology & Evolution*, 13, 122-123.
- (120) **Gadagkar, R.** (1997). The evolution of caste polymorphism in social insects: genetic release followed by diversifying evolution. *Journal of Genetics*, 76, 167-179.
- (121) Naug, D. and **Gadagkar, R.** (1998). The role of age in temporal polyethism in a primitively eusocial wasp. *Behavioral Ecology and Sociobiology*, 42, 37-47.
- (122) **Gadagkar, R.** (1998). How to gain the benefits of sexual reproduction without paying the cost: a worm shows the way. *Trends in Ecology & Evolution*, 13, 220-221.
- (123) **Gadagkar, R.** (1998). Wherever they may roam – Discovering new bird and animal species just became easier. *Down to Earth*, 6 (21), p.25.
- (124) **Gadagkar, R.** (1998). Introduction is forever – Introduced bee species may create problems for native species in India. *Down to Earth*, 6 (22), p.28.
- (125) **Gadagkar, R.** (1998). Food fighters – Why do siblings fight with each other? A look at the science behind this universally common behaviour. *Down to Earth*, 7 (3), 24-25.
- (126) Naug, D. and **Gadagkar, R.** (1998). Division of labor among a cohort of young individuals in a primitively eusocial wasp. *Insectes Sociaux*, 45, 247-254.
- (127) **Gadagkar, R.** (1998). Killer genes, green beards.... Down to Earth, 7, (13), 15-16.
- (128) **Gadagkar, R.** (1998). Red ants with green beards. *Journal of Bioscience*, 23, 535-536.
- (129) **Gadagkar, R.** (1999). *Caenorhabditis* and the cost of sex – Reply from R. Gadagkar. *Trends in Ecology & Evolution*, 14, 33-34.

- (130) Arathi, H.S. and **Gadagkar, R.** (1998). Cooperative nest building and brood care by nestmates and non nestmates in *Ropalidia marginata*: implications for the evolution of eusociality. *Oecologia*, 117, 295-299.
- (131) **Gadagkar, R.** (1999). What is Life? – Reconsidered. A Review of – *Origins of Life* by Freeman Dyson, Cambridge University Press (1985). *Resonance – journal of science education*, 4 (2), 88-90.
- (132) **Gadagkar, R.** (1999). Subterranean farmers – Ants invented agriculture some 50 million years before the humans. *Down to Earth*, 7 (21), 48-49.
- (133) Sathees Chandra, B.C., Geetha, L., Abraham, V.A., Karanth, P., Thomas, K., Srinivasan, M.V., and **Gadagkar, R.** (1998). Uniform discrimination of pattern orientation by honey bees. *Animal Behaviour*, 56, 1391-1398.
- (134) Naug, D. and **Gadagkar, R.** (1999). Flexible division of labor mediated by social interactions in an insect colony – a simulation model. *Journal of Theoretical Biology*, 197, 123-133.
- (135) **Gadagkar, R.** (2000). The True Origin of Agriculture: Credit Goes to the Ants. *Resonance – journal of science education*, 5 (2) 76-79.
- (136) **Gadagkar, R.** (2000). Do our maternal and paternal genes pull us in different directions? *Current Science*, 78, 376-380.
- (137) **Gadagkar,R.** (2000). The Origin and Resolution of Conflicts in Animal Societies – The Case of the Bees and the Birds. *Resonance – journal of science education*, 5 (4) 62-73.
- (138) **Gadagkar,R.** (2000). Biology versus computers. *Current Science*, 78 (7) p.768.
- (139) **Gadagkar,R.** (2000). ‘Ant’ics and antibiotics – A Review of - The *Earth Dwellers – Adventures in the Land of Ants* by E.Hoyt, Simon & Schuster, (1996). *Down to Earth*, 9 (3), 58-59.
- (140) **Gadagkar,R.** (2001). Extracts from the book – *The Social Biology of Ropalidia marginata: Toward Understanding the Evolution of Eusociality*, Harvard University Press, Cambridge, Massachusetts.
- (141) **Gadagkar,R.** (2000). Genomic Imprinting – Some Interesting Implications for the Evolution of Social Behaviour. *Resonance – journal of science education*, 5 (9) 58-68.
- (142) Fisher, B.L., Malsch, A.K.F., **Gadagkar, R.**, Delabie, J.H.C., Vasconcelos, H.L. and Majer, J.D. (2000). Applying the ALL protocol: Selected Case Studies. In: *Ants: Standard Methods for Measuring and Monitoring Biodiversity* (Biology Diversity Handbook Series). (Ed.) D.Agosti, Smithsonian Institution Press, Washington, pp.207-214.
- (143) Sumana, A. and **Gadagkar, R.** (2001). The structure of dominance hierarchies in the primitively eusocial wasp *Ropalidia marginata*. *Ethol. Ecol. & Evol.*, 13, 273-281.

- (144) Gopinath,A., **Gadagkar, R.** and Rao, M.R.S. (2001). Identification of polymorphic microsatellite loci in the queenless ponerine ant *Diacamma ceylonense*. *Molecular Ecology Notes*, 1, 126-127.
- (145) **Gadagkar, R.** (2001). Division of Labour and Organization of Work in the Primitively Eusocial Wasp *Ropalidia marginata*. *Proc. Indian natn. Sci. Acad.* **B67**, 397-422.
- (146) **Gadagkar, R.** (2000). Caring for our co-inhabitants – on the campus and beyond! Preface to the Special Issue on Biodiversity. *J. Indian Institute of Science*, November –December, Vol.**80**.
- (147) Kardile,S.P. and **Gadagkar, R.** (2002). Docile sitters and active fighters in paper wasps: a tale of two queens. *Naturwissenschaften*, 89, 176-179.
- (148) **Gadagkar,R.** (2002). Two Cultures at the Wissenschaftskolleg. Wissenschaftskolleg, Jahrbuch 2000/2001, 68-75.
- (149) Cuvillier-Hot, V., **Gadagkar, R.**, Peeters, C. and Cobb, M. (2002). Regulation of reproduction in a queenless ant: aggression, pheromones and reduction in conflict. *Proc. R. Soc. Lond. B.*, 269, 1295-1300.
- (150) Agrahari,M. and **Gadagkar, R.** (2003). Juvenile hormone accelerates ovarian development and does not affect age polyethism in the primitively eusocial wasp, *Ropalidia marginata*. *Journal of Insect Physiology*, 49, 217-222.
- (151) Sumana,A. and **Gadagkar,R.** (2003). *Ropalidia marginata* – a primitively eusocial wasp society headed by docile queens. *Current Science*, 84, 1464-1468.
- (152) **Gadagkar,R.** (2003). WIKO - A Veritable Incubator for Competent Radicals. Wissenschaftskolleg, Jahrbuch 2001/2002, 79-86.
- (153) **Gadagkar, R.** (2003). Is the peacock merely beautiful or also honest? *Current Science*, 85 (7) 1012-1020.
- (154) Karpagakunjaram,V., Nair, P., Varghese,T., Royappa,G., Kolatkar,M. and **Gadagkar,R.** (2003). Contributions to the biology of the queenless ponerine ant, *Diacamma ceylonense*. *J.Bombay Nat. Hist. Soc.* 100 (2&3), 533-543.
- (155) Kardile,S.P. and **Gadagkar,R.** (2003). Regulation of worker activity in the primitively eusocial wasp *Ropalidia cyathiformis*. *Behaviour*, 140, 1219-1234.
- (156) **Gadagkar,R.** (2004). Next time we hear a frog croak, let's say thank you! *Current Science*, 86 (1), 15-16.
- (157) **Gadagkar,R.** (2004). John Maynard Smith 6 January 1920 – 19 April 2004. *Journal of Biosciences*, 29 (2) 139-141.
- (158) Agrahari,M. and **Gadagkar, R.** (2004). Hard working nurses rather than overaged nurses permit *Ropalidia marginata* to respond to the loss of young individuals. *Insectes Sociaux*, 51, 306-307.

- (159) **Gadagkar,R.** (2004). Genetically engineered monogamy in voles lends credence to the modus operandi of behavioural ecology. *Journal of Genetics*, 83 (2), 109-111.
- (160) **Gadagkar,R.** (2004). Why do honey bee workers destroy each other's eggs? *Journal of Biosciences*, 29 (3), 213-217.
- (161) Ramaswamy,K., Peeters,C., Yuvana,S.P., Varghese,T., Pradeep,H.D., Dietemann,V., Vedham,K., Cobb,M. and **Gadagkar,R.** (2004). Social mutilation in the Ponerine ant *Diacamma*: cues originate in the victims. *Insectes Sociaux*, 51, 410-413.
- (162) **Gadagkar,R.** (2004). Sex... Only if Really Necessary in a Feminine Monarchy. *Science*, 306, 1694-1695.
- (163) **Gadagkar,R.** (2005). Donald Griffin Strove to give Animals their Due. *Resonance – journal of science education*, 10(2), 3-5.
- (164) Agrahari,M. and **Gadagkar,R.** (2004). Division of labour and its regulation in a primitively eusocial wasp. In: *Proceedings of the National Symposium on Frontier Areas of Entomological Research*, Nov. 5-7 2003 (Eds.) Subrahmanyam,B., Ramamurthy,V.V. and Singh,V.S., Indian Agricultural Research Institute, New Delhi, pp. 237-253.
- (165) **Gadagkar, R.** (2005). Obituary – Ernst Mayr (1904-2005). *Journal of Genetics*, 84(1), 87-89.
- (166) **Gadagkar, R.** (2004). Life, Mind and Consciousness. *Papers read at a Seminar held at the Ramakrishna Mission Institute of Culture, Kolkata*, India on 16, 17 and 18 January 2004, The Ramakrishna Mission Institute of Culture, Kolkata, pp.232-252.
- (167) **Gadagkar, R.** (1997). Extracts from the book – *Survival Strategies – Cooperation and Conflict in Animal Societies*, Harvard University Press, Cambridge, Massachusetts (USA).
- (168) **Gadagkar, R.**, Nair, P., Chandrashekara, K., Bhat, D.M. (2000). Ants species diversity in the Western Ghats, India. In: *Sampling Ground-dwelling Ants: Case Studies from the World's Rain Forests*. (Eds.) D.Agosti, J.Majer, L.Alonso, and T.Schultz, Curtin University, School of Environmental Biology, Bulletin No.18, Perth, Australia, pp.19-30.
- (169) **Gadagkar,R.** and Chandrashekara,K. (2005). Behavioral Diversity and its Apportionment in a Primitively Eusocial Wasp. In: *Insect Phenotypic Plasticity–Diversity of Responses* (Eds.) T.N.Ananthakrishnan & Douglas Whitman, Science Publishers, Inc., Enfield, USA and Plymouth, UK, pp.107-124.
- (170) Gadagkar, R. (2005). The Logic of Animal Conflict. *Resonance – journal of science education*, 10(11) p.5.
- (171) **Gadagkar, R.** (2005). "Nothing in Biology Makes Sense Except in the Light of Evolution" – A Review of The Theory of Evolution by John Maynard Smith, Canto Edition, Cambridge University Press, (1993). *Resonance – journal of science education*, 10 (11), 95-97.

- (172) Bruyndonckx,N., Kardile,S.P. and **Gadagkar, R.** (2006). Dominance behaviour and regulation of foraging in the primitively eusocial wasp *Ropalidia marginata* (Lep.) (Hymenoptera: Vespidae). *Behavioural Processes*, 72, 100-103.
- (173) Sen,R. and **Gadagkar,R.** (2006). Males of the social wasp *Ropalidia marginata* can feed larvae, given an opportunity. *Animal Behaviour*, 71, 345-350.
- (174) **Gadagkar, R.** (2006). Guest Editorial - Some Reflections on the Pursuit and Evaluation of Science. *Current Science*, 90 (4), 473-474.
- (175) Deshpande,S.A., Sumana,A., Surbeck,M. and **Gadagkar,R.** (2006). Wasp who would be queen: a comparative study of two primitively eusocial species. *Current Science*, 91 (3), 332-336.
- (176) **Gadagkar, R.** (2006). The Evolution of a Biologist in an Interdisciplinary Environment. In: *25 Jahre Wissenschaftskolleg zu Berlin 1981-2006*, (Eds.) Grimm,D. and Meyer-Kalkus,R., Berlin, Academie Verlag, pp.167-180.
- (177) **Gadagkar, R.** (2006). Who First Invented Agriculture? In: Indian Institute of Science Pensioners' Association, Bangalore, Silver Jubilee, 1980-2005. Souvenir, pp. 9-10.
- (178) Kardile,S.P. and **Gadagkar,R.** (2005). Observations on the Natural History and Behaviour of the Primitively Eusocial Wasp *Ropalidia cyathiformis* (Fab.) (Hymenoptera: Vespidae). *Journal of Bombay Natural History Society*, 102 (3), 265-273.
- (179) **Gadagkar, R.** (2006). Subaltern Insect Societies – A Review of –*The Other insect Societies* by James T.Costa, The Belknap Press of Harvard University Press, Cambridge, Massachussets & London (2006), *Science*, 314, p.1391.
- (180) Lamba,S., Kazi,Y.C., Deshpande,S., Natesh,M., Bhadra,A. and **Gadagkar,R.** (2007). A possible novel function of dominance behaviour in queen-less colonies of the primitively eusocial wasp *Ropalidia marginata*. *Behavioural Processes*, 74, 351-356.
- (181) Bhadra,A., Iyer,P.L., Sumana,A., Deshpande,S.A., Ghosh,S. and **Gadagkar,R.** (2007). How do workers of the primitively eusocial wasp *Ropalidia marginata* detect the presence of their queens? *Journal of Theoretical Biology*, 246, 574-582.
- (182) **Gadagkar, R.** (2007). Foreword – *The Evolution of Social Wasps* by J.H.Hunt, Oxford University Press, Oxford, 2007, pp.vii-ix.
- (183) **Gadagkar, R.** (2007). Rats are nicer than we think, at least to each other. *Journal of Biosciences*, 32 (7), 1223-1225.
- (184) Sumana,A., Deshpande S.A., Bhadra,A. and **Gadagkar, R.** (2008). Workers of the primitively eusocial wasp *Ropalidia marginata* do not perceive their queen across a wire mesh partition. *Journal of Ethology*, 26, 207-212.
- (185) * **Gadagkar,R.** (2008). Open-access more harm than good in developing world. *Nature*, 453, p.450.
- (186) Gadagkar,R. (2008). Why I do not discourage my students from “wasting” their time with the “theatre”? MOITREE, *The Bangla Theatre Festival in Bengaluru*, 3-4.

- (187) Lamba,S., Chandrasekhar,K. and **Gadagkar,R.** (2008). Signalling hunger through aggression - the regulation of foraging in a primitively eusocial wasp. *Naturwissenschaften*, 95, 677-680.
- (188) **Gadagkar,R.** (2008). What's happening at the Centre for Contemporary Studies and Why? *Voices*, No.6, *Indian Institute of Science, Bangalore*.
- (189) **Gadagkar,R.** (2008). Cooperation. In: Behavioural Ecology.Vol.1 of *Encyclopedia of Ecology*, (Eds.) S.E.Jorgensen and Fath,B.D., Elsevier Ltd., Oxford, pp.776-777.
- (190) Bhadra,A. and **Gadagkar,R.** (2008). We know that the wasps 'know': cryptic successors to the queen in *Ropalidia marginata*. *Biology Letters*, 4, 634-637.
- (191) **Gadagkar, R.** (2008). Why are animals nice to each other? In: *The Seventy Great Mysteries of the Natural World*, (Ed.) M.J. Benton, Thames & Hudson Ltd., London, pp.225-228.
- (192) Bhadra,A., Jordan,F., Sumana,A., Deshpande,S.A. and **Gadagkar,R.** (2009). A comparative social network analysis of wasp colonies and classrooms: linking network structure to functioning. *Ecological Complexity*, 6, 48-55.
- (193) Klein,S. (2009) The Wasp Understannder (Interview of Prof. **Raghavendra Gadagkar**), *Die Zeit/Zeit Magazin*, 21-23.
- (194) Mossman,K. (2009). Profile of **Raghavendra Gadagkar**. *Proceedings of the National Academy of Sciences, USA*, 106, 10404-10406.
- (195) Gadagkar, R. (2009). Interrogating an Insect Society. *Proceedings of the National Academy of Sciences, USA*, 106, 10407-10414.
- (196) Gadagkar,R. (2009). Open access does more harm than good when based on a 'pay to publish' business model. *Physiology News*, 75, p.46.
- (197) Johny,S.,Charkabarty,S. **Gadagkar,R.** and Nagaraju,J. (2009). Polymorphic microsatellite loci for primitively eusocial wasp *Ropalidia marginata*. *Molecular Ecology Resources*, 9 (4) 1172-1175.
- (198) Nagendra,H. and **Gadagkar,R.** (2009) (Guest Editors: Special Section – *Science and Society*). In this issue - Society and Science: Interdisciplinary Exchanges, *Current Science*, 97, 1513-1514.
- (199) Gadagkar,R. (2009). A Review of - *The Social Amoebae :The Biology of Cellular Slime Molds*' by J.T.Bonner, Princeton University Press, Princeton (2009). *Current Science*, 97,1675-1676.
- (200) Gadagkar,R. (2009). Why are animals (and humans) nice to each other? In: *Current Trends in Science – Platinum Jubilee Special*, (Ed.) N. Mukunda, Indian Academy of Sciences, Bangalore, pp.191-197.
- (201) Gadagkar,R. (2009). In Praise of Organismal Biology, *Proceedings of the Platinum Jubilee of the Indian National Science Academy*, New Delhi, pp.37-41.
- (202) Gadagkar, R. (2010) A Review of - *The Lives of Ants* by Laurent Keller and Élisabeth Gordon (Translated from French by James Grieve), Oxford University Press, Oxford, 2009. *Myrmecological News*, 13, 29-30.
- (203) Sen,R., Samudre,S., Shilpa,M.C., Tarak,R.C. and **Gadagkar,R.** (2010). Middle aged wasps mate through most of the year, without regard to body size, ovarian development and nestmateshp: a laboratory study of the primitively eusocial wasp *Ropalidia marginata*. *Insectes Sociaux*, 57,95-103.

- (204) Bang,A., Deshpande,S., Sumana,A. and **Gadagkar,R.** (2010). Choosing an appropriate index to construct dominance hierarchies in animal societies: a comparison of three indices. *Animal Behaviour*, 79, 631-636.
- (205) Sen,R. and **Gadagkar,R.** (2010). Natural history and behaviour of the primitively eusocial wasp *Ropalidia marginata* (Hymenoptera: Vespidae): a comparison of the two sexes. *Journal of Natural History*, 44, 959-968.
- (206) Bhadra,A., Mitra,A., Deshpande,S.A., Chandrasekhar,K., Naik,D.G., Hefetz,A. and **Gadagkar,R.** (2010). Regulation of Reproduction in the Primitively Eusocial Wasp *Ropalidia marginata*: on the trail of the queen pheromone. *Journal of Chemical Ecology*, 36, 424-431.
- (207) **Gadagkar,R.** (2010). Foreword. *A Concise Field Guide to Indian Insects & Arachnids* by Meenakshi Venkataraman, Simova Education and Research, Madhavanagar, Bangalore, p. vi –vii.
- (208) Shilpa,M.C., Sen, R. and **Gadagkar, R.** (2010). Nestmateship, body size and dominance do not influence mate choice in males and females: A laboratory study of a primitively eusocial wasp *Ropalidia marginata*. *Behavioural Processes*, 85, 42-46.
- (209) Karnik,N., Channaveerappa,H., Ranganath,H.A. and **Gadagkar,R.** (2010). Karyotype instability in the ponerine ant genus *Diacamma*. *Journal of Genetics*, 89 (2), 173-182.
- (210) **Gadagkar,R.** (2009). Foreword – *Satpada – Our World of Insects* by Thomas,R. and Iyer,G., Rishi Valley Education Centre, Krishnamurti Foundation India, Andhra Pradesh, pp.v-vi.
- (211) **Gadagkar, R.** (2010). Sociobiology in turmoil again. *Current Science*, 99 (8), 1036-1041.
- (212) **Gadagkar,R.** (2010). CSIR Foundation Day Lecture : War and Peace: Conflict and Cooperation in an Insect Society. *CSIR News*, 60, 221-224.
- (213) **Gadagkar, R.** (2010). Profile – In love with *Ropalidia marginata*: 34 years, and still going strong. In: *Social Behaviour – Genes, Ecology and Evolution* (Eds.) Székely,T., Moore,A.J. and Komdeur,J., Cambridge University Press, Cambridge, UK, pp.85-87.
- (214) **Gadagkar,R.** (2010). Ant, Bee and Wasp Social Evolution. In: *Encyclopedia of Animal Behaviour, Volume 1*, (Eds.) Breed,M. and Moore,J., Academic Press, Oxford, pp.73-81.
- (215) Mitra,A., Saha,P., Chaoulideer,M.E., Bhadra,A. and **Gadagkar,R.** (2011). Chemical communication in *Ropalidia marginata*: are caste and colony signals conveyed through the same set of chemicals? *Journal of Insect Physiology*, 57, 280-284.
- (216) Mitra,A. and **Gadagkar,R.** (2011). Can Dufour's gland compounds honestly signal fertility in the primitively eusocial wasp *Ropalidia marginata*? *Naturwissenschaften*, 98, 157-161.
- (217) **Gadagkar,R.** (2010). War and Peace: Conflict and Cooperation in a Tropical Insect Society. In: *Common Knowledge: The Challenge of Transdisciplinarity* (Eds.) Moira Cockell, Jérôme Billotte, Frédéric Darbellay, and Francis Waldvogel, EPFL Press, pp. 75-96.
- (218) **Gadagkar, R.** (2011). What can we learn from insect societies? In: *Nature and Culture* (Eds.) R.Narasimha and S.Menon), Centre for Studies in Civilizations (CSC) and Project of History of Indian Science, Philosophy and

- Culture (PHSPC), Volume XIV, Part 1, New Delhi, pp.357-365.
- (219) **Gadagkar, R.** (2011). The birth of ant genomics. *Proc. Natl. Acad. Sci, USA*, 108, 5477-5478.
- (220) **Gadagkar, R.** (2011). Science as a hobby: how and why I came to study the social life of an Indian Primitively eusocial wasp. *Current Science*, 100, 845-858.
- (221) Sen,R. and **Gadagkar, R.** (2011). Behavioural and morphological dimorphism of the sexes: an account of two primitively eusocial wasps. *Journal of Natural History*, 45, 1295-1309.
- (222) **Gadagkar, R.** (2011). Altruistic Wasps? *Science*, 333, 833-834.
- (223) **Gadagkar, R.** (2011). Reproduction: the almost forgotten currency of fitness. *Current Science*, 101, 725-726.
- (224) Saha,P.. Balasubramaniam,K.N., Kalyani,J.N., Supriya,K., Padmanabhan,A. and **Gadagkar, R.** (2012). Clinging to royalty: *Ropalidia marginata* queens can employ both pheromone and aggression. *Insect Soc.*, 59,41-44.
- (225) Shilpa,M.C., Sen,R., Samudre,S. and **Gadagkar, R.** (2012). Males, but not females, mate with multiple partners: a laboratory study of a primitively eusocial wasp *Ropalidia marginata*. *Insect Soc.*, 59,61-65.
226. Mitra,A. and Gadagkar,R. (2012). Queen signal should be honest to be involved in maintenance of eusociality: chemical correlates of fertility in *Ropalidia marginata*. *Insect. Soc.*, 59, 251-255.
227. Mitra,A. and **Gadagkar, R.** (2012). Road to Royalty – Transition of Potential Queen to Queen in the Primitively Eusocial Wasp *Ropalidia marginata*. *Ethology*, 118, 694-702.
228. Mitra,A. and **Gadagkar, R.** (2012). Queens and Workers of the Primitively Eusocial Wasp *Ropalidia marginata* do not Differ in Their Dufour's Gland Morphology. *Sociobiology*, 59 (3), 875-884.
229. Kaube, J. (2011). The Ten Commandments of Successful Research on Wasps - and All Other Types of Research (Interview of Prof. Raghavendra Gadagkar), Köpfe und Ideen, Wissenschaftskolleg zu Berlin (Institute for Advanced Study), Berlin, Germany, pp.10-15.
230. Gadagkar, R. (2012). The Luxury of Introspection. In: Über das Kolleg hinaus - Joachim Nettelbeck, dem Sekretär des Wissenschaftskollegs 1981 bis 2012 (Beyond the college - Joachim Nettelbeck, the Secretary of the Wissenschaftskollegs from 1981-2012) (Eds.) Diawara, M.; Günther, K., and Meyer-Kalkus, R., Wissenschaftskolleg zu Berlin, Germany, pp. 152-157.
231. Bang,A. and Gadagkar,R. (2012). Reproductive queue without overt conflict in the primitively eusocial wasp *Ropalidia marginata*. *Proc. Natl. Acad. Sci. USA*, 109, 14494-14499.
232. Shukla,S., Chandran,S. and Gadagkar,R. (2013). Ovarian developmental variation in the primitively eusocial wasp *Ropalidia marginata* suggests a gateway to worker ontogeny and the evolution of sociality. *Journal of Experimental Biology*, 216, 181-187.
233. Nandi,A.K., Bhadra,A., Sumana,A., Deshpande,S.A. and **Gadagkar, R.**

- (2013). The Evolution of Complexity in Social Organization – A Model Using Dominance-Subordinate Behavior in Two Social Wasp Species. *Journal of Theoretical Biology*, 327, 34-44.
234. Shukla,S., Shilpa,M.C. and **Gadagkar,R.** (2013). Virgin wasps develop ovaries on par with mated females, but lay fewer eggs. *Insectes Sociaux*, 60, 345-350.
235. Mitra,R., Ramachandran,A. and **Gadagkar,R.** (2014). Nestmate discrimination in the social wasp *Ropalidia marginata*: chemical cues and chemosensory mechanisms. *Animal Behaviour*, 88, 113-124.
236. Mitra,A. and **Gadagkar,R.** (2014). The Dufour's gland and cuticle in the social wasp *Ropalidia marginata* contain the same hydrocarbons in similar proportions. *Journal of Insect Science*, 14 (9). <http://www.insectscience.org/14.9>
237. Gadagkar,R. (2014). A Review of – *Randomness in Evolution* by J.T.Bonner, Princeton University Press, Princeton, New Jersey, 2013. *Current Science*, 106, 9, 1312-1313.
238. Shukla,S., Pareek,V. and **Gadagkar,R.** (2014). Ovarian development in a primitively eusocial wasp: Social interactions affect behaviourally dominant and subordinate wasps in opposite directions relative to solitary females. *Behavioural Processes*, 106, 22-26.
239. Gadagkar,R. (2014). Role of Science, Technology and Innovation in Ensuring Sustainable Inclusive Development. *Proc. Indian Natn. Sci. Acad.* 80, 181-183.
240. Gadagkar,R. (2015) Cooperation. In: *Reference Module in Earth Systems and Environmental Sciences*, Elsevier, (ed.) Reedijk,J., Waltham, MA, pp.1-2.
241. Roughgarden,J., Adkins-Regan,E., Akcay,E., Crawford,J.C., **Gadagkar,R.**, Griffith,S.C., Hinde,C., Hoquet,T., O'Connor,C., Prokop,Z.M., Prum,R.O., Shafir,S., Snow,S.S., Taylor,D., Van Cleve,J. and Weisberg,M. (2014). Sexual Selection Studies: A NESCent Catalyst Meeting. PeerJ PrePrints. (doi.org/10.7287/peerj.preprints.680v2).
242. Gadagkar,R. (2015). Solve local problems. *Nature*, 521, p.153.
243. Gadagkar,R. (2015). How Should Biologists Engage With Controversial Mathematical Theory? *Current Science*, 108, 1869-1873.
244. Mitra,A., Nettimi,R.P., Ramachandran,A., Saha,P. and **Gadagkar,R.** (2015). Males and females of the social wasp *Ropalidia marginata* do not differ in their cuticular hydrocarbon profiles and do not seem to use any long-distance volatile mate attraction cues. *Insectes Sociaux*, 62, 281-289.
245. Mandal,S. and **Gadagkar,R.** (2015). Homing abilities of the tropical primitively eusocial paper wasp *Ropalidia marginata*. *Journal of Comparative Physiology A*, 201, 795-802. (doi: 10.1007/s00359-015-1019-2)
246. Gadagkar,R. (2015). The Family System of a Social Wasp. In: *The Family Emotional System – An Integrative Concept for theory, Science and Practice*. (Eds.) Noone,R.J. and Papero,D.V, Lexington Books, Boulder, pp.161-183.
247. Gadagkar,R. (2015). Referee Report For: Competition over guarding in the Arabian babbler (*Turdoides squamiceps*), a cooperative breeder (version 1;

- referees: 1 approved, 2 approved with reservations). *F1000Research*, 4, 618. doi: 10.5256/f1000research.7238.r11476.
248. Gadagkar,R. (2016). Evolution of social behaviour in the primitively eusocial wasp *Ropalidia marginata*: do we need to look beyond kin selection? *Phil. Trans. R. Soc. B.* 371, 1-8. doi.org/10.1098/rstb.2015.0094
 249. Bang, A. and Gadagkar,R. (2016). Winner-loser effects in a eusocial wasp. *Insectes Sociaux*, 63, 349-352. doi:10.1007/s00040-015-0455-x.
 250. Olejarz,J.W., Allen,B., Veller,C., Gadagkar,R. and Nowak,M.A. (2016). Evolution of Worker Policing. *Journal of Theoretical Biology*, 399,103-116. doi: <http://dx.doi.org/10.1016/j.jtbi.2016.03.001>
 251. **Gadagkar, R.** and Gopinathan, K.P. (1978). Inhibition of DNA injection from mycobacteriophage I3 by Tween-80. *Virology*, 91, 487-488.
 252. Gopinathan, K.P., Saroja, D., **Gadagkar, R.** and Ramakrishnan, T. (1978). Control of lysogeny in mycobacteria. In: *Genetics of Actinomycetales*. (Eds.) E.Freerksen, I.Tarnok and J.H.Thumim. Gustav, Fisher Verlag, pp.237– 242.
 253. **Gadagkar, R.** and Gupta, G. (1979). A nick free solution to the DNA winding problem - Round-up of research, *Science Today*, 13 (15), December, p.33.
 254. Gadagkar, R. (1980). Seminar on evolution of social behaviour. *Journal of Scientific Industrial Research*, 39, 298-301.
 255. **Gadagkar, R.** and Gopinathan, K.P. (1980). Bacteriophage burst size during multiple infections. *Journal of Biosciences*, 2, 253-259. doi: 10.1007/BF02703251
 256. **Gadagkar, R.** and Gopinathan, K.P. (1980). Growth of *Mycobacterium smegmatis* in minimal and complete media. *Journal of Biosciences*, 2, 337-348. doi: 10.1007/BF02716867
 257. **Gadagkar, R.**, Nanjundiah, V., Joshi, N.V. and Sharat Chandra, H. (1981). Measurement of the ratio of the number of X chromosomes to sets of autosomes in *Drosophila melanogaster*. *Current Science*, 50, 805-807.
 258. **Gadagkar, R.**, Gadgil, M., and Mahabal, A.S. (1982). Observations on population ecology and sociobiology of the paper wasp *Ropalidia marginata* (Lep.) (Family:Vespidae). *Proceedings of the Symposium on Ecology and Animal Population*, Zoological Survey of India, pp. 49-61.
 259. **Gadagkar, R.**, Nanjundiah, V., Joshi, N.V. and Sharat Chandra, H. (1982). Dosage compensation and sex determination in *Drosophila* : Mechanism of measurement of the X/A ratio. *Journal of Biosciences*, 4, 377-390. doi: 10.1007/BF02702750
 260. Gadagkar, R. (2001). Bill Hamilton – The Greatest Darwinian Since Darwin. *Resonance – journal of science Education*, April, 4-5.
 261. Gadagkar,R. (2006). Exporting Metaphors, Concepts and Methods from the Natural Sciences to the Social Sciences and vice versa. In: *Understanding Change – Models, Methodologies, and Metaphors* (Eds.) Wimmer,A. and Kossler,R., Palgrave Macmillan, New York, pp.187-195. doi: 10.1007/978-0-230-52464-4_13.
 262. **Gadagkar,R.** and Nowotny,H. (2006). Konflikt oder Kooperation. Strategien tierischer und menschlicher Gemeinschaften. In: *Thema: Warum Krieg? Texte und Protokolle zum Briefwechsel Albert Einstein – Sigmund Freud, von Schlebrügge, J. (Ed.) Bruno Kriesky Forum fur internationalen Dialog,*

- pp.160-170.
263. Gadagkar,R. (2011). War and Peace - Conflict & Cooperation in an Insect Society. *Science Reporter*, January, 8-12.
264. McBean, G., Reddy, D., Lee, Y. T., Jinghai, L., Clegg, M., Black, D., Erazmus, B., Ball, J., **Gadagkar, R.**, Moreau, N., Tatsumi, K., de León, M., Buckeridge, J.; Altan, O. and de la Rey, C. (2015). International Council for Science Responds. *Nature*; 517, p.145.
265. Ramaswamy, K. (2015).The Centre for Contemporary Studies [Interview with Prof. Raghavendra Gadagkar]. *Connect*, 2(1),15-19.
266. Gadagkar, R. (2016). The 'pay-to-publish' model should be abolished. *Notes and Records: The Royal Society Journal of the History of Science*, 1-2. doi:10.1098/rsnr.2016.0039.
267. Gadagkar, R. (2016). A Review of - *The Most Perfect Thing: Inside (and Outside) a Bird's Egg* by Tim Birkhead, Bloomsbury, USA, 2016. *Proc. Indian Natn. Sci. Acad.*, 82,1323-1324.
268. Gadagkar, R. (2017). The Universe – Which Tools to Understand It. *Proc. Indian Natn.Sci. Acad.*, 83, 5-7. doi: 10.16943/ptinsa/2016/48860.
269. Gadagkar, R. (2016). Die Zukunft könnte uns überraschen (The future could surprise us). *Frankfurter Allgemeine Zeitung*, NR 280, (November 30).
270. Peso, M. (2017). Interview with a social insect scientist : Raghavendra Gadagkar.*Insectes sociaux Blog*.
<https://insectessociaux.com/2017/07/20/interview-with-a-social-insect-scientist:Raghavendra%20Gadagkar>
- 271a. Sridhar, H. and **Gadagkar, R.** (2017). Standing conventional wisdom on its head – an interview with Raghavendra Gadagkar (Full interview). Ecology Students Society, Centre for Ecological Sciences, Indian Institute of Science.
[URL:https://cesess.wordpress.com/2017/07/13/standing-conventional-wisdom-on-its-head-a-conversation-with-raghavendra-gadagkar-full-interview/](https://cesess.wordpress.com/2017/07/13/standing-conventional-wisdom-on-its-head-a-conversation-with-raghavendra-gadagkar-full-interview/)
- 271b. Sridhar, H. and **Gadagkar, R.** (2017). Standing conventional wisdom on its head – Conversation with Prof. Raghavendra Gadagkar [Excerpt].
[URL:https://indiabioscience.org/columns/conversations/standing-conventional-wisdom-on-its-head/](https://indiabioscience.org/columns/conversations/standing-conventional-wisdom-on-its-head/)
- 271c. Sridhar, H. and **Gadagkar, R.** (2018). Standing conventional wisdom on its head: an interview with Raghavendra Gadagkar. *Dialogue – Science, Scientists, and Society*. 1 (1). doi:10.29195/DSSS.01.01.0004.
- 272a. Gadagkar, R. (2016). Why does our society lack scientific temper and what can scientists do about it? *Journal of Scientific Temper*, 4 (1 & 2), 57-60.
- 272b. Gadagkar, R. (2018). Why does our society lack scientific temper and what can scientists do about it? *Confluence*, Indian Academy of Sciences, 2

- January.
(originally published in Journal of Scientific Temper, 2016, 4, 57-60).
<http://confluence.ias.ac.in/why-does-our-society-lack-scientific-temper-and-what-can-scientists-do-about-it/>
273. Supriya, D. G. (2017). Professor Raghavendra Gadagkar: The world at his doorstep. *NRI Pulse*.
<http://www.nripulse.com/professor-raghavendra-gadagkar-the-world-at-his-doorstep/>.
274. Gadagkar, R. (2017). Invited as a SynTalk. #TKAK (The Kith And Kin, June 24, 2017) [Web Page].
<https://syntalk.wordpress.com/episodes/turn-three/tkak/>
275. **Gadagkar, R.** and Niranjana, T. (2017). The Integrated Science Education Experiment - Centre for Contemporary Studies (CCS) - Indian Institute of Science and Centre for the Study of Culture and Society (CSCS), 2006-14. - A Conversation between Raghavendra Gadagkar and Tejaswini Niranjana. In: *Breaking the Silo - Integrated Science Education in India*, (Eds.) Dhar, A., Niranjana, T. and Sridhar, K., Bengaluru: Orient BlackSwan, pp.38-64.
276. Gadagkar, R. (2016). Foreword - Merging the spirit of Art and Science. In: *Arting Science* (Ed.) Bitasta Das, IISc Press, pp.7-8.
277. Gadagkar, R. (2017). The evolution of culture (or the lack thereof): mapping the conceptual space. *J. Genetics*, 96, 513-516. doi: 10.1007/s12041-017-0795-6.
278. Gadagkar, R. (2017). Indian National Science Academy: Some Challenges Ahead. *Proc. Indian Natn. Sci. Acad.*, 83, 1-4. doi: 10.16943/ptinsa/2017/41291.
279. Gadagkar, R. (2017). The World (of education, research and business) Is No Longer What We Imagined - A Review of - *Whiplash - How to Survive Our Faster Future* by J. Ito and J. Howe, Grand Central Publishing, New York (2016). *Proc. Indian Natn. Sci. Acad.*, 83, 717-719.
280. Unnikrishnan, S. and Gadagkar, R. (2017). Dominance based reproductive queue in the primitively eusocial wasp, *Ropalidia cyathiformis*. *Insectes Sociaux*, 64, 495-503. doi: 10.1007/s00040-017-0568-5
281. Mandal, S., Brahma, A. and **Gadagkar, R.** (2017). Homing in a tropical social wasp: role of spatial familiarity, motivation and age. *J. Comp. Physiol. A*. 203, 915-927. doi: 10.1007/s00359-017-1202-8.
282. Gadagkar, R. (2017). A Tale of Science, Passion and Politics. A Review of – *How to Tame a Fox (and Build a Dog) – Visionary Scientists and a Siberian Tale of Jump-Started Evolution* by L.A. Dugatkin and Lyudmila Trut, The University of Chicago Press, Chicago and London (2017). *Proc. Indian Natn. Sci. Acad.* 83, 973-975. doi:10.16943/ptinsa/2017/49222.
283. Gadagkar, R. (2017). Ant, Bee and Wasp Social Evolution. In: *Reference Module in Life Sciences*, Elsevier. doi:10.106/B978-0-12-809633-8.01024-4 (Revised version of serial no. 214).

284. Gadagkar, R. (2017). Choosing a New Queen: Consensus without Conflict in a Social Wasp Colony. In: *Landscapes of Collectivity in the Life Sciences*. (Eds.) S.B. Gassis, E. Lamm and A.Shavit, The MIT Press, Cambridge, Massachusetts, pp.67-75.
285. Brahma, A., Mandal, S. and **Gadagkar, R.** (2018). Emergence of cooperation and division of labor in the primitively eusocial wasp *Ropalidia marginata*. *Proceedings of the National Academy of Sciences, USA*, 115, 756-761.
286. Chakraborty, S., Shukla, S. P., Arunkumar, K.P., Nagaraju, J. and **Gadagkar, R.** (2018). Genetic relatedness does not predict the queen's successors in the primitively eusocial wasp, *Ropalidia marginata*. *Journal of Genetics*, *in press*.
287. Saha, P., Nandi, A.K., Unnikrishnan, S., Shilpa, M. C., Shukla, S., Mandal, S., Mitra, A. and **Gadagkar, R.** (2018). A route to direct fitness: natural and experimentally induced queen succession in the tropical primitively eusocial wasp *Ropalidia marginata*. *Journal of Insect Behavior*, *in press*.
288. Brahma, A., Mandal, S. and **Gadagkar, R.** (2018). Current indirect fitness and future direct fitness are not incompatible. *Biology Letters*. 20170592. dx.doi.org/10/1098/rsbl.2017.0592.
289. Chakraborty, S., Bhadra, A., Nandi, A. K., Annagiri, S., Deshpande, S., Lamba, S., Bang, A. and **Gadagkar, R.** (2018). Evolution of reproductive dominance in animal societies – lessons from a social wasp. *Proceedings of the Indian National Science Academy*. doi: 10.16943/ptinsa/2018/49310.
290. Gadagkar, R. (2018). Let's Create Budgetary Literacy. *Confluence – Indian Academy of Sciences*. <http://confluence.ias.ac.in/lets-create-budgetary-literacy/>
291. Gadagkar R. (2018). Evaluate the Evaluations! *Dialogue - Science, Scientists, and Society*, 1(1). <http://dialogue.ias.ac.in/article/9123/evaluate-the-evaluations>
doi:10.29195/DSSS.01.01.0005
292. Taylor, H. (Presenter). 2018. Is birdsong music? The Science Show, Australian Broadcasting Corporation Radio.
<http://www.abc.net.au/radionational/programs/scienceshow/is-birdsong-music/9416572>; Presenter: Hollis Taylor; Producer: David Fisher; Sound Engineer: Russell Stapleton; **Guests:** Tim Low, Ofer Tchernichovski, Constance Scharff, Richard Prum, Ani Patel, Onur Güntürkün, Philip Kitcher, **Raghavendra Gadagkar**, Bernie Krause
293. Mandal, S., Brahma, A. and **Gadagkar, R.** (2018). Ontogeny of familiarity with foraging landscape and foraging abilities in the tropical social wasp *Ropalidia marginata*. *bioRxiv*, *in press*. doi:<http://dx.doi.org/10.1101/272831>