

LITERATURE CITED

Ahir, K. (2005) *Distribution and biology of arthropods in Gir protected areas and its surrounding ecosystem (with respect to insects-coleoptera)*. Ph.D Thesis submitted to The M.S University of Baroda, Vadodara.

Alfred, J.R.B. (2003) Diversity, dimension and significance of insects: an overview in the Indian context. *Proceedings of the National Symposium on Frontier Areas of Entomological Research*. Nov. 5-7, IARI, New Delhi, India.

Alfred, J.R.B.Das, A.K. and Sanyal, A.K. (1998) *Faunal diversity of India*, Envis center, Zoological Survey of India, Kolkata, I-VIII: 1-495.

Alomor, O., Goula, M.and Albajes,R.(2002) Colonization of tomato fields by predatory mirid bugs (Hemiptera: Heteroptera) in Northern Spain.In Editorial: Introducing field margin ecology in Europe. *Agriculture, Ecosystem and Environment* **89**:1-4.

Ananthkrishnan, T.N , Nayar, K.K. and David ,B.V.(1981) *General and applied entomology*. First edition Tata McGraw Hill publishing company limited, New Delhi.

Ananthkrishnan, T.N. and David, B.V.(2004) *General and applied entomology* pp 311.Second edition Tata McGraw Hill publishing company limited, New Delhi.

Bohac,J. (1999) Staphylinid beetles as bioindicators. *Agriculture, Ecosystems & Environment* **74** (1-3):357-372.

Borror, D.J., Triplehorn, C.A and Johnson, N.F. (1992) *An introduction to study of insects*. Sixth edition. Saunders College Publishing.

Carpaneto, G.M., Mazziotta, A and Valerio L, (2007) Inferring species decline from collection records: roller dung beetles in Italy (Coleoptera, Scarabaeidae) .*Diversity and Distributions* **13** (6): 903–919.

Connor, E.F., Hafernik, J., Levy, J., Moore, V.L and Rickman, J.K. (2002) Insect conservation in an urban biodiversity hotspot: The San Francisco Bay Area. *Journal of Insect Conservation* **6**(4): 247–259.

Dave ,M. (2002) *Bioinformatics on the ecological and evolutionary divergence of herbaceous plants growing in Baroda region*. Ph.D Thesis submitted to Department of Botany, The M.S.University of Baroda, Vadodara.

Davis, C.A.J. (2000) Species richness of dung feeding beetles (Coleopteran: Aphodiidae, Scarabaeidae, Hybosoridae) in Tropical rainforest at Danum valley, Sabah, Malaysia. *The coleopterist Bulletin* **54**(2):221-231.

Dempster, J.P. and Pollard, E. (1986) Spatial heterogeneity stochasticity and detection of density dependence in animal population,*Oikos* ,**46**:413-423.

Desender, K. and Bosmans ,R. (2004) Ground beetles (Coleoptera, Carabidae) on set-aside fields in the Campine region and their important for nature conservation in Flanders(belgium). *Journal of biodiversity and Conservation*, **7**(11):1485-1493.

Duff, E.J..(2007) Biodiversity .In: Encyclopedia of earth .Eds.Cutler .J.Cleveland ,<http://www.eoearth.org/article/biodiversity> retrived on June 12,2008.

Eardley, C. (2008) *Pollinators:-a conservation priority Science in Africa*. Issue 2,

Edsall, T. A., Bur, M. T., Gorman, O.T. and Schaeffer, J. S. (2005) Burrowing mayflies as indicators of ecosystem health: status of populations in western Lake Erie, Saginaw Bay and Green Bay, *Aquatic Ecosystem Health & Management* **8** (2):107-116.

Emblidge, A .and Schuster,E. (1999) Saving pollinators.*Zoogoer* **28** (1)

Frederie, B and Terry, W.A. (2005) Diptera Diversity in homogeneous Habitat: Brachycera Associated with sedge meadows (cyperacea: carex) in Quebec Canada. *Proceeding of entomology society of Washington*, **107**(1): 176-189.

Giberson, D.J., Bilyj, B. and Burges, N. (2001) Species diversity and emergence patterns of Nematocerous flies (Insecta: Diptera) from three coastal salt marshes in Prince Edward Island, Canada. *Estuaries* **24** (6A) :862-874.

Gordon, R. (2008) *Introduction to taxonomy*.Earthlife web production. Available from www.earthlife.net/insects.html retrived on 14th March 2008

Gupta, R.K. (2003) The diversity of bees (Hymenoptera, Apoidea) in India.In: Advancement in insect biodiversity .Ed: Rajiv.K.Gupta.Published by Agrobios (India) Jodhpur.

Hall, S. (2003) Biodiversity Conservation in Agroecosystems: A Comparison of Surface dwelling Beetle Diversity in Various Shade Coffee Production Systems in Costa Rica *FES Outstanding Graduate Student Paper Series* **7** (2).

Hayden, J E. (2004) *Wild metro and Insect survey* (2004). Available on www.wildmetro.org/Insects 2004.pdf,retrived on November 2007.

Hiriyana, J., Arunachalam, N., Samuel, P .,Henmozhi, V. ,Gajanana, A. and Satyanarayana, K. (2003) Studies on the mosquito fauna in a Japanese

encephalitis prone area in Kerala . *India journal of entomology*, **28** (2) :139-146.

Hughes, J.B., Daily, G.C. and Ehrlich (2000) Conservation and insect diversity : a habitat approach. *Conservation Biology*, **14**(6): 1788-1797

Hyman, P. S. and Parson, M.S. (1992) A review of the scarce and threatened coleoptera of great britain (part1).*U.K nature conservation series report*.

Infrastructure assessment of Vadodara city (2006) from http://www.vadodaracity.com/cdp_pdf/Link%205.pdf.on retrived on 15th May 2008

Ishitani, M. , Kotze, D. J. and Niemelä ,J. (2003) Changes in carabid beetle assemblages across an urban-rural gradient in Japan . *J. of Ecography* **26** (4): 481–489.

Jana, G; Misra, K. K. and Bhattacharya ,T. (2006) Diversity of some insect fauna in industrial and non-industrial areas of West Bengal. India. *Journal of Insect Conservation* **10** (3): 249-260

Jayakumar, M., Raja, M. and William S. J. (2006) Biodiversity of insect and conservation .Proc.: National conference on biodiversity held in National Biodiversity Authority ,Chennai, India.

Kadoya, T., Suda,S. and Washitani,I. (2004) Dragonfly species richness on man-made ponds: effects of pond size and pond age on newly established assemblages. *Ecological Research*, **19** (5): 461-467.

Kevan, P. G. (1999) Pollinators as bio indicators of the state of the environment: species, activity and diversity.*Agriculture, Ecosystems & Environment* . **74** (1-3):373-393.

Klein, A.M and Tscharntke. (2003) Fruit set of highland coffee increases with the diversity of pollinating bees. University of Gottingen, Germany. From,<http://www.gwdg.de/~uaoe/ProcRoyalSoc.2003>,**270**:955-961, retrieved on 2005

Kumar,A and Khanna,V. (2004)*Globally threatened indian fauna: status issues and prospects*.Zoological Survey of India, Northern Regional Station, Dehra Dun.from
www.wii.gov.in/inianfauna/GloballyThreatenedIndianFauna.pdf retrieved on 4 March 2008.

Kumar Dolly and Naidu Bhumika (2006) Bio control agents and their interaction with crops. In: *Progress in Herbal technology*, Scientific Publishers, Jodhpur, 237-245.

Kumar Dolly and M.S.Shiva Kumar (2003) Abundance and diversity of Butterflies in Vadodara district, Gujarat. *Indian Journal of Environmental Sciences*, **11**(2):145-148.

Kunte,K (2001) Butterfly Diversity Of Pune City Along Human Impact Gradient .*Journal of Ecological Society* **13/14**: 40-45

Lefroy, H. M.(1909) *Indian insect life* ,Thaker spink and comp,Calcutta

Lobo, J.M. (2001) Decline of roller dung beetle (Scarabaeinae) populations in the Iberian Peninsula during the 20th century. *Biological Conservation* **97**(1): 43-50.

MacArthur, R. H. and Wilson, E.O. (1967) *The Theory of Island Biogeography*. Princeton University Press, Princeton, New Jersey, USA.

Maheshwari, J.K. (2003) Endangered pollinators .*Archives of enviro news – News letter of ISEB, India* **9** (1):1-4

Maicykutty, P. M. and Usha, R. (2002) Five new species of Zygineillini (Cicadellidae: Typhlocybinae) from India, *Shashpa*. **9** (2): 109-120.

Marshall, E.J.P. (2001) Editorial: Introducing field margin ecology in Europe . *Agriculture, Ecosystem and Environment* **89**:1-4.

Mathew, G. and Benoy, C.F. (2003) Chapter 3. An overview of insect diversity of Western Ghats with special reference to Kerala state.In: *Biodiversity of the Western Ghats – An Overview*. Published by Wildlife Institute of India www.wii.gov.in/envis/rain_forest/chapter3 retrived on 17 January 2007

Mathew, G. (2002) An inventory of insects of Neyyar and Peppara Wildlife Sanctuaries .KFRI, *Consultancy Report* , No. 5 : 1-33.

Mathew, G., Shamsuddin, R.S.M. and Brijesh, C.M. (2007) Insect fauna of Neyyar wildlife sanctuary, Kerala. *India Zoos print journal*, 22(12):2930-2933.

Matteson, K.C. (2006) A final report on diversity and conservation of insects in community gardens and one park in NewYork City.www.nyrp.org/pdf/MattesonReport2006. Retrieved on 12 February ,2007.

McKenna, D.D., McKenna, K.M., Malcolm, S.B. and Berenbaum, M.R. (2001) Mortality of Lepidoptera along roadways in Central Illinois. *Journal of Lepidoptera Society*, **55**: 63-68.

Namwanda, P., and Ngaboyamahina ,T. (2000) A comparative study of coleopteran, Diversity and abundance in disturbed and undisturbed forest in Amani nature reserve. easternarc.or.tz/downloads/TBA-East-Usambara/reports-2005

Narendran, T.C., Ramesh Babu, M.G. and Usha Kumari, R. (2001) A new species and key species of Anteromorpha (Hymenoptera: Scelionidae) *India. Journal of eco biodiversity* 13(4):293-296.

Narendran, T.C. (2001) Taxonomic Entomology: Research and education in India. *Current science*, 81(5)

Nedved, K.M. and Fric, Z. (2002) Early-spring floods decrease the survival of hibernating larvae of a wetland-inhabiting population of *Neptis rivularis* (Lepidoptera: Nymphalidae). *Acta Zoologica Academiae Scientiarum Hungaricae* 48(2): 79-88.

Niemela, J., Kotze, D., Venn, S., Lyubomir, P., Ivaudo, S., Spence, J., Dustin, H. and Enrique, M. (2001) Carabid beetle assemblages (Coleoptera, Carabidae) across urban- rural gradients: an international comparison. *Landscape Ecology* 17(5):387-401

Nummelin, M., Lodenius, M., Tulisalo, E., Hirvonen, H. and Alanko,T. (2007) Predatory insects as bio indicators of heavy metal pollution .*Journal of Environmental Pollution* 145(1): 339-347.

Pardeshi, M. (2008) Insect pests, their control and management in Agro ecosystem of Gujarat: with special emphasis on termites. Ph.D.Thesis submitted to M.S, University of Baroda, Vadodara.

Peck, S.B .(1998) The cave inhabiting beetles of Cuba (Insecta:Coleoptera) : Diversity, distribution and ecology. *Journal of Cave and Karst Studies*, 60 (3):156-166.

Pereira, D. and Santos,G. (2006) Ecology, behavior and bionomics diversity in bee(Hymenoptera:Apoidea) and social Wasp (Hymenoptera:Vespidae, Polistinae) community in “Campos Rupestres ”, Bahia, Brazil, <http://www.Scielo.br/ne/>, retrieved on March-April 2006.

Pilo, B., B.Suresh.,B.Pradeep ., Siliwal, M. and Dhuru, S. (2001) Butterfly fauna of Jessore slothbear Sanctuary in Gujarat. *Journal of insect environment* **6**:157-159.

Prasad, M. and Kulkarni, P.P. (2001) Insecta: Odonata In :(Ed) Director Z.S.I. Kalkata, fauna of Nilgiri Biosphere Reserve, fauna of conservation area series II .*Journal of zoological survey of India*, pp. 73-83.

Prayoonrat Pragrom (2003) Insects diversity of order diptera in mangrove forest in Chachaengsao region of Thailand. *Proceedings of 27th Congress on science and Technology of Thailand*,
http://www.scisoc.or.th/stt/28/web/content/I_09/I01.htm retrived on Dec2005

Pyle, R. M., Bentzien, M., and Opler, P. (1981) Insect conservation. *Annual Review of Entomology*, **26**:233-258.

Ragaei, M. and Allam, M. (1997) Reviews and Views: Insect conservation and diversity. *Journal of Islamic Academy of Sciences*, **10**(2):43-48.

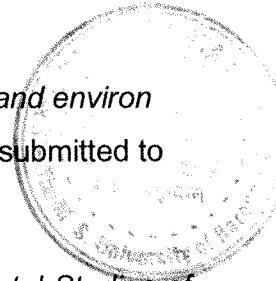
Rai, M.M., Giradkar, P., Rathod, M.K. and Khurad, A.M. (2007) Biodiversity: colour pattern and butterfly biodiversity in tiger reserve in Tadoba national park, Maharashtra- *proceeding in national conference on biodiversity , NBA Chennai*.

Rainio,J. and Niemela,J.(2003) Ground beetles (Coleoptera: Carabidae) as bioindicators. *Biodiversity and Conservation*, **12**: 487–506.

ehounek ,J.(2002) Comparative study of the leaf beetles (Coleoptera : Chrysomelidae) in chosen localities in the district of Nymburk . *Biologica*. 39–40.

Richard, O.W and Davis R.G. (1977) *Imm's General textbook of entomology*, Tenth edition,**2**:422-1354.

Sabnis ,S. (1967) *A Study of the flora & vegetation of Baroda and environ including account of the Cyperaceae of Gujarat* . Ph.D.Thesis submitted to the M. S University of Baroda, Vadodara



Sabnis ,S.D. and Amin,J.V. (1992) *Report of Eco-environmental Studies of Sardar Sarovar Environs.Environment series-2.The Maharaja SayajiRao University Press,M.S.University of Baroda,Vadodara.*

Sabu, T K., Vinod, K.V. and Vineesh, P.J. (2006) Guild structure, diversity and succession of dung beetles associated with Indian elephant dung in South Western Ghats forests.*Journal of Insect Science*, **6**:17.

Sally, E., Fraser, M., Dytham, C and Mayhew, P .J. (2007) Determinants of parasitoid abundance and diversity in woodland habitats. *Journal of applied ecology*, **44**:352-361.

Samways, M.J. (1988) *Man, insect and ethics*. Inaugural Lecture, University of Natal Press.

Samways, M.J. (2007) Insect Conservation :A Synthetic Management Approach *Annual Review of Entomology*,**52**:465-87.

Santos,G.M.;Carlos,C.,Bichara,F.,Resende,J.,Cruz,J and Marques,O.(2007) Diversity and community structure of social wasps(Hymenoptera: Vespidae) in three ecosystems in itaparica island, Bahia State, Brazil .*Neotropical Entomology* **36** (2)

Scheffler, P.(2005) Dung beetle (Coleoptera: Scarabaeidae) diversity and community structure across three disturbance regimes in easternAmazonia. *Journal of tropical ecology*, **21**(1):9-19.

Shishodra, M.S.and Kulkarni, P.P. (2001) Insecta: Grylloidea,. In: (ed.) Director Z.S.I. Kolkata. *Fauna of Nilgiri biosphere Reserve fauna of conservation Area series II*, Zoological survey India. Pp 64-72

Simberloff, D.S. and Wilson, E.O. (1969) Experimental zoogeography of islands. *Ecology* **50**:267-314

Singh, R.P. ,Singh, R.P. and Singh,A.K.(2005) Impact of bee pollination on hybrid seed production of *Brassica rapa*(MS-6 X NDT88-1). *Indian Journal entomology*, **67**(2):100-101.

Sommaggio, D. (1999) Syrphidae: can they be used as environmental bio indicators, *Agriculture, Ecosystems & Environment* . **74**(1-3):343-356.

Soni,H., Nirmal Kumar,J.I. and Kumar ,R.N.(2005) A preliminary investigations of butterfly diversity of Sardar Patel University Campus, Vallabh Vidyanagar, Gujarat. *Bugs 'R' All*, **8**(1):2-3.

Southern African Butterfly Conservation Assessment (2007), from <http://sabca.adu.org.za/> retrieved on 18 February 2008

Steffan-Dewenter I. and Tscharntke T. (2000) Butterfly community structure in Fragmented Habitats .*Ecol.Lett.***3**: 449-56

Stickler, K. and Soliman, K. (2001) Bee pollinator of alfalfa and Egyptian clover, file://G:\egyptbees2001.html. retrieved on 26 July 2006

Subramanian, K.A. (2005) *Dragonflies and Damselflies of Peninsular India-A Field Guide*. E-Book of Project Lifescape. Centre for Ecological Sciences, Indian Institute of Science and Indian Academy of Sciences, Bangalore, India.

Sundararaj, R. (2005) Species diversity of whiteflies (Aleyrodidae: Homoptera) in India. *Biodiversity: Life to our mother earth*, pp.1-12.

Suryaprakash, S.P.(2007) Butterflies of Delhi-wildbytes : Iwc's monthly newsletter.conservation of butterflies part III.

Swaminathan, R. (2005) Diversitey of predatory coccinellids in different agroecosystems in southern India.*Proceeding of The 2005 ESA annual meeting and exhibition* – December 15-18 ,2005.Ft. Landerdale, FL.

Tank, B. D., Korat, D. M. And Borad, P. K. (2007) Determination of Dominant Species of Predatory Coccinellid in Anand Region of Gujarat Karnataka *Journal of Agricultural Sciences* **20**(3).

Thirumalai, G., Radhakrishnan, C. and Suresh Kumar, R. (2003) A synoptic list of Gerromorpha (Hemiptera: Insecta) known from Kerala,. In: Rajiv K. Gupta (ed.), *Advancements in Insect Biodiversity*, Published by Agrobios (India), Jodhpur. pp.299-312

Trumbule, R. B. and Denno, R. F. (1995) Light intensity,host-plant irrigation, and habitat-related mortality as determinants of the abundance of azalea lace bug (Heteroptera: Tingidae). – Environ. *Entomol.* **24**: 898–908.

Unniyal, V.P and Bhargav, V. (2007) *Tiger Beetles-A field study in the Shivaliks of Himachal pradesh* published by Wildlife institute of India ,Uttarakhand.

Unniyal, V.P. (2004) Butterflies of Nanda Devi National Park- A World Heritage Site. *The Indian Forester*, **130** (7): 800-804.

Vadodara district - Wikipedia, the free encyclopedia.Retrieved from "http://en.wikipedia.org/wiki/Vadodara_district , 20 October 2007

Vasudeva, P., Hegde, S. and Veer, V. (2007) Tabanid Flies (Diptera: Tabanidae) of Rajiv Gandhi National Park Karnataka, India Publisher: Taylor & Francis. *Journal of entomology research society*, **9**(1): 53-62.

Vazirani, T.G. (1997) Catalogue of oriental dytiscidae, records of Zoo. Survey. India, *Oikos*, **6**:111.

Virues,S.G. and Eben, A .(2005) Comparison of beetle diversity and incidence of parasitism in Diabroticina (Coleoptera:Chrysomelidae) Species collected on cucurbits. *Florida entomologist*, **88**(1):72-76.

Wilson E. O. (1992) *The Diversity of Life*. W. W. Norton Company, Inc., New York, NY.

Winter, Kim (2006) Conservation of Pollinating Species, *The Endangered Species Update*, BNED_com.htm.

Wynter-Blyth, M.A. (1957) *Butterflies of the Indian region*.published for Bombay natural history society,in CME press ,Poona

Zahoor, K., Suhail, M.A., Iqbal, J., Zulfaqar, Z and Anwar, M. (2003) Biodiversity of Predaceous Coccinellids and Their Role as Bioindicators in an Agro-ecosystem international. *Journal of agriculture and biology*, **05** (4): 555 –559.

Zanette, L. R. S; Martins, R. P. and Ribeiro, S. P. (2005) Effects of urbanization on Neotropical wasp and bee assemblages in a Brazilian metropolis. *Landscape and Urban Planning* **71** (2-4): 105-121.

Zanette,L.R.S.,Martin, R.P.,Tulisalo, L., Hirronen,H and Alanko ,T.(2001) Predatory insects as bioindicator of heavy metal pollution. *Journal of environmental pollution*, **145**(1): 339-347.

Zelazana, E.,and Blazejewicz-Zawadzinska,M (2005) Species Diversity of Carabids (Coleoptera, Carabidae) in Different types of Bydgoszcz Urban Green Belts and Suburban Environments .*Folia biologica* (Kraków), vol. **53**, Supplement