

Biodiversity of Mosquitoes (Order-Diptera) of Dhule District and Their economic importance.

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Abstract – Mosquitoes are very dangerous pest of man & his belongings. These causing millions of death due to various diseases like Malaria, Filaria, Yellow - Fever, Encephalitis, Dengue, Swine-flue etc. It occurs as vector in all diseases.

Key-words- Culex, Aedes, Anophelcs, Nematocera,

Introduction- Do you know only mosquito females are blood suckers while males are vegetarian pollen suckers. But mosquito females suck pollens, sap suckers only

upto breeding.

Nandurbar district lies between the river Narmada & Tapti forms the Northern & Southern boundaries of the study area. It encompasses the major part

Of Nandurbar district. The area lie between $73^{\circ}-46' -42''$ to $74^{\circ} -22' -33''$ East Longitudinal $21^{\circ} -29' -50''$ to $21^{\circ}-43' -53''$ North Therefore this also contains hilly maintains & water bodies in which aquatic insets larvae, pupae & adult insects grow.

Materials and Methods :-

For collection of the mosquito larvae and mosquito of different water bodies

Are checked. These water bodies are fresh-water like ponds , streams, ditches are

Observed. Even in brackish water bodies mosquito occurs. 80% alcohol is used for

Preservation of mosquito larvae, & are observed in laboratory like, Aedes aegypti

Culex pipiens fatigans etc.

For collection beakers are used then their mouthparts, sitting arrangement on ponds, Egg-masses all are observed. This all things are noticed.

Discussion :- There are 2500 species of mosquitos through out the world. But some says are 1400 species, some put this number to 2000. In India, there are 400

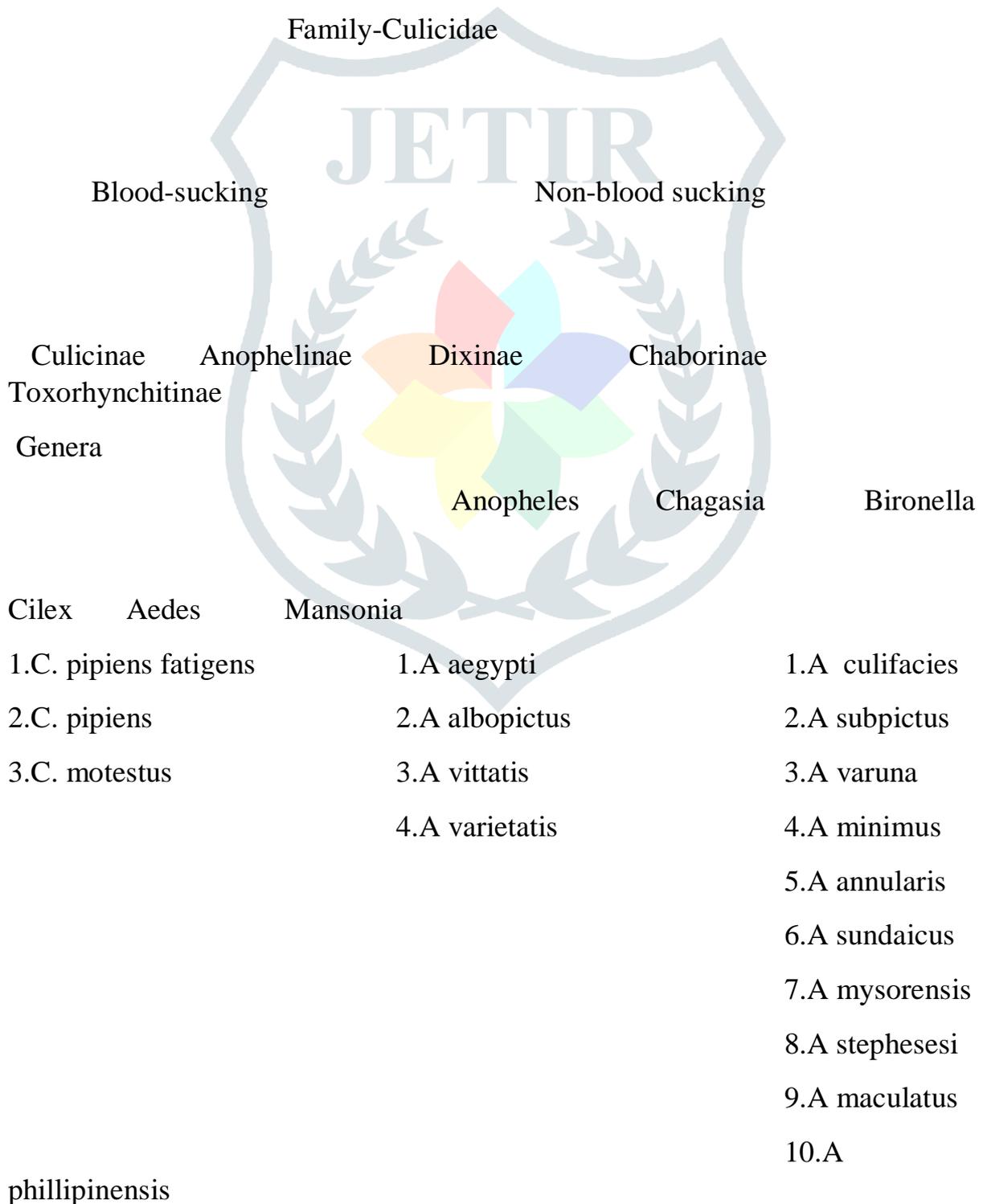
species of Anopheles mosquitos occurs. Out of which 42 recorded from India. Out

of which 10* are vectors of Malarial parasites. Culicidae family is blood sucking

species. They differ from each other.

Order- Diptera

Suborder- Nematocera



	11.A
leucopyras	12.A fluvistus
	13.A
balabecensis	14.A sinensis
	15.A aconotus

Pathogenecity:- Mosquito acts as a vectors to cause various diseases in man

& his belongings. Diseases caused by Culicidae during (2003-05)

Sr. No.	Disease	Patients recorded	Deaths occurred
1	Malaria	Dhadgaon 357 (NDB) (2003-05)	Certain may die (unknown)
2	Encephalitis	Many	Many
3	Dengue – fever in state of Maharashtra <ul style="list-style-type: none"> • Dengue virus -1 • Dengue virus -2 Isolates • Dengue virus -3 • Dengue virus -4 	O2 (December-2004) <ul style="list-style-type: none"> • Dhule-58 (Suspicious) • Shirpur-08 • Mumbai & Pune -09 • Yavatmalb-900 (Dec.04) • Nandurbar-02 (Dec.04) 	00 00 09 00
4	Swine – Flu	Many (Through out of India & abroad)	Many

In animals they transmit fowl-pox & poultry , Myxomatosis of Rabbits, Rift-Valley fever of Sheep, Encephalitis of horses, birds, Heart-worm of Dogs eg.Dermatobia a South American warble fly transmits its eggs to skin of man & animals through bites. On world over ,millions of deaths occur due to Malaria every-day ,Again they cause Dengue, Filaria ,Yellow-

Control – measures :-

- Sealing of drainage - & ponds respectively.
- Spread of kerosene on ponds where water is collected / stored & mosquito grows.
- Screening of Ventilators, windows & doors.
- Use of mosquito-nets from preventing mosquito – bites.

- Use of guppy and Gambusian fishes for killing mosquito larvae, pupae etc.
- Picking mosquito by hand – picking method and kill them mechanically larvae. Of tabnids, nymphs of Damsel – fly and may flies feeds – on mosquito-larvae and are used the pest population.
- Kill with seed oil or neem -extract.

Acknowledgement :-

I am very much thank to my guide, principal, pratap college, Amalner

Principal, Dr.M.V. Patil, management of SSVPS` s Dr.P.R.Ghogrey Science College, Dhule

Conclusion :-

Mosquitoes are therefore, number one enemy of human and his domesticated animal from ancient times. They cause huge economic loss to various countries and man on medical grounds

Reference :-

- " communicable disease control programmes in india ". Dr. Atanu Sarkar, M.B.B.S., MCH (JNU), Health action vol.12-13 Dec.2000
- Effect of medium pH of some aspects of life of culex fatigans (Diptera: culicidae)- Tannu Shree 1 and Ajit kumar Sinha 2- Int.J.Mendel, vol.6(1-4),55-56,2009
- The effect of medium pH on the larvae of Aedes aegypti and culex unquiefasciatus. Int.J.of pure and applied sciences- Umar A. and Don Pedro, K.N. 2008Vol.2(58-6)
- World malaria report available in <http://www.who.int/mediacentre/factsheets/fs094/en/2011>