Culex- nuisance mosquito

Imp.-culex fatigans, vector of bancroftian filariasis, domestic, around dwellings; dirty water collections like stagnant drains, cesspools, septic tanks, burrow pits etc.

Highly anthrophilic, enters human houses at dusk and maximum density by midnight

Prefer legs below knee; during day rest on walls, underneath furniture, inside empty pots and in dark corners.

Aedes (stegomyia)- white strips on black body; striped or banded legs called tiger mosquitos

Vector for yellow fever; breeds in artificial accumulation of water, discarded tins, broken bottles, fire buckets, flower pots, tree holes.

Lay eggs singly, cigar shaped, do not fly over long distances, usually less than 100 meters which facilitates its eradication

Under international health regulations, all seaports and airports are kept free from all types of mosquitoes for a distance of 400 meters

Aedes aegypti index- ration, expressed as percentage, between the no. of houses in a limited well defined area on the premises of which actual breeding of Aedes aegypti are found and the total no. of houses examined in that area.

Mansonia- big, black or brown mosquitoes; breed in ponds and lakes containing certain aquatic plants like pistia stratiotes and water hyacinth. Eggs laid in star shaped clusters on undersurface of leaves of these aquatic plants.

Control of mansonoides mosquitoes is easy by removal or destruction of aquatic host plants by herbicides

Habits-

Feeding- males never bite, females are haematophagous; anthrophilic prefer human blood, zoophilic prefer animal blood, some on both.

Time of biting-evening or early night.

Resting habits- some rest indoors-endophilia; some outdoors- exophilia

Breeding habits- anopheles prefer clean water, culcine prefer dirty polluted water, aedes prefer artificial collection of water, Mansonia on aquatic vegetations

Hibernation- in sever winters

Dispersal- in a range up to 11 km.

Life span- 8-34 days; males as a rule are short lived.

Mosquito borne diseases-

Anopheles-malaria, filarial

Culex- Bancroftian filariasis, Japnese encephalitis, west Nile fever, viral arthritis

Aedes- yellow fever, dengue, DHF, Chikungunya fever, CHF, Rift valley fever, filarial

Mansonoides- Malayan filariasis, Chikungunya fever

Mosquito control measures- integrated approach- to combine 1 or more methods for maximum result.

Antilarval-

a) environmental- source reduction through minor engineering methods like filling, leveling, drainage of breeding places and water management

Rendering water unsuitable for mosquito breeding. Abolition of cesspools, open ditches; adequate collection, removal and disposal of sewage and waste water

Get rid of water holding containers like discarded tins, empty pots and coconut shells

Removal and destruction of aquatic plants by herbicides

b) chemical control- mineral oils- diesel oil, fuel oil, kerosene, mosquito larvicidal oil; 40-90 liters per hectar. Once in 1 week to all breeding places.
   Paris green- copper acetoarsenite, stomach poison
   Synthetic insecticides- fenthion, chlorpyriphos, abate; organophosphurus comp.
c) biological control- gambusia affinis, lecbister reticulatous

anti adult measures-

residual sprays- DDT 1-2 gms per square meter every