Certification Exam B

**Salt marsh mosquitoes**

1. *Aedes squamiger*

2. *Aedes taeniorhynchus*

3. *Aedes dorsalis*

**Species introduced in southern Cali (LA) in 2011**

-*Aedes albopictus*

**Western tree-hole mosquito (transmit dog heartworm)**

-*Aedes sierrensis*

**Tule/cattail mosquito**

-*Culex erythrothorax*

**Western encephalitis mosquito and primary vector for West Nile Virus**

-*Culex tarsalis*

**Breeding in date fields (palm groves)**

-*Psorophora columbiae*

**Stages of larvae (called instars)**

-Four

**Environmental conditions that favor survival of adult mosquitoes**

-Moderate temperature and high humidity

**Mosquitoes that lay eggs in rafts**

-*Culex*

**Mosquitoes that lay single eggs**

-*Aedes*

-*Anopheles*

**How many serotypes of dengue virus?**

-Five

**Vectors of West Nile virus:**

-*Culex tarsalis*

-*Culex quinquiefasciatus*

-*Culex pipiens*

**Controlling larvae and pupae**:

-Petroleum oils

-Alcohol

**Which sex of mosquitoes emerge first?**

-Males

**In Cali, the most important infectious diseases associated with mosquitoes are**

-Arboviruses

**Species found in inland irrigated and flooded areas**

-*Aedes melanimon*

-*Aedes nigromaculis*

**The EPA registered and most widely used chemical formulation in insect repellents**

-DEET

**Insecticide class banned in the US (Cali)**

-Organochlorines (example DDT)

**Chemical class mostly used for adult mosquito control**

-Pyrethroid/Pyrethrum

**Terms to pay attention to**:

-Temperature/Thermal inversion layer = ground temperatures are lower than those at higher altitudes) -favorable for ULV spraying

-Integrated pest management (IPM) =

-Physical control = environmental manipulation

-Biological control = using other insects and animals)

-Drift = movement of insecticides to non-target areas

-Biorational insecticides and examples (Bti, Bs, spinosad, methoprene)

-Insecticide/pesticide resistance =

-Selective pressure =

-Phytotelmata = water held by living plants, where mosquitoes breed

-Diapause = suspension of particular physiological activities

-Hibernation = inactivity during winter

-Aestivation = inactivity during summer

-Weather = short-term environmental condition vs

-Climate = long-term environmental condition

- Neurologic sequelae = long-lasting nervous system afflictions such as palsy after recovery

- *Anopheles hermsi* occurring south and west of the Tehachapi Mountains and Coastal Ranges and *Anopheles freeborni* occurring to the north and east of these ranges

-Insecticide Category and Labels/Signal words

-Pyrethroids and mode of action

-Different types of masks and their uses (From Cat A)