

Technical Guide about pest encountered in KAUST and how it is being controlled.

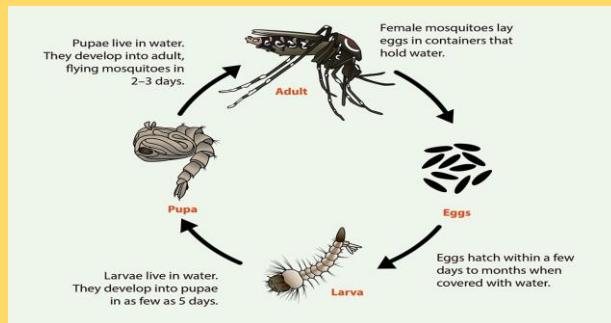
MOSQUITO : Facts and Notes | Control | Prevention

Facts and Notes

Almost everyone has been bitten by a mosquito. Mosquitoes are common, flying insects that live in most parts of the world. Over 3,500 types of mosquitoes can be found worldwide but not all are disease vector. In KAUST, two species were identified, the nuisance *Culex* spp and occasionally, the *Aedes* sp..

Mosquitoes breed in a calm water, and as short as 10 days, new mosquitoes may fly out of the water. The adult mosquito live for about 2 to 4 weeks depending on the species and its surrounding, but only the female mosquitoes bite because they need blood to produce eggs.

Mosquitoes rest in dark, humid places like under sinks, in showers, in closets, under furniture, or in the laundry room. They may enter the house and lay eggs at indoor plant with water and at toilet bowl that is seldom used.



Pest Control procedures in managing pests

1. Assess the area. Conduct thorough inspection of the surrounding to identify the breeding source and the species. A thin amount of water at any container is enough to breed mosquitoes.
2. Implement control following the applicable IPM principles, starting with;
 - **Cultural control** - eliminate breeding source. Clean the surrounding and remove any container-like object. Chronic breeding sites should be surveyed weekly.
 - **Biological control** – at large breeding sites like Golf Lake, use mosquito eating fish or Bacteria based formulation using Vectobac G - Bti 2.8% G (WHO Class: III, Local Reg.: 182-143-1378).
 - **Chemical control** – at cases that activity past the threshold, use approved chemicals as per product label claims.
 - At chronic breeding sites (e.g. manhole), use first least-toxic larvicide Biopren Tablet (IGR) S-Methoprene 0.5% (WHO Class: U, Local Reg.: 203-104-1333), or Natural DT Tablet – Spinosad 2.8% (WHO Class: III, Local Reg.: 162-92-1281), or the highly diluted IGR Starcide 480 SC - Triflumuron 48% SC (WHO Class: U, Local Reg.: 176-104-1114) or Actellic 50EC – Pirimiphos-methyl 50% (WHO Class: II, Local Reg.: 100-143-1401).
 - To control adult mosquitoes, at indoor, use multi-insect killer (e.g. Baygon) while at outdoor, use ULV spraying with highly diluted Cypermethrin 1% EW (WHO Class: II, Local Reg.: 32-143-1396).
 - 3. Mosquito can't be exterminated. So, monitoring with suited monitoring traps is required to determine if control is successful. Keep record for tracking.

What you can do to prevent mosquitoes at home

- Remove standing water where mosquitoes could lay eggs in your garden.
- Once a week change the water of your indoor plants.
- Remove any container-like that can collect water from irrigation or rain. These for example are inflatable pool, plant pot saucers, vehicle tire, food container, bucket, etc.
- Call 959 to report water stagnation from irrigation or any other water source.