

## Mosquitoes - Mode of Action Classification by Target Site

### Nerve & Muscle Targets (Larvae)

1. Acetylcholinesterase (AChE) inhibitors  
*1B: Organophosphates*
5. Nicotinic acetylcholine receptor (nAChR) allosteric modulators – site I  
*Spinosyns*

### Unknown or uncertain MoA

- UNM Non-specific mechanical and physical disruptors  
*Polydimethylsiloxane (PDMS)*

### Nerve & Muscle Targets (Adults)

1. Acetylcholinesterase (AChE) inhibitors  
*1A: Carbamates*  
*1B: Organophosphates*
3. Sodium channel modulators  
*3A: Pyrethrins, Pyrethroids*
4. Nicotinic acetylcholine receptor (nAChR) competitive modulators  
*4A: Neonicotinoids*  
*4D: Butenolides*
30. GABA-gated chloride channel allosteric modulators  
*Meta-diamides, Isoxazolines*



### Growth & Development Targets (Larvae)

7. Juvenile hormone receptor modulators  
*7A: Juvenile hormone analogues*  
*7C: Pyriproxyfen*
15. Inhibitors of chitin biosynthesis, affecting CHS1  
*Benzoylureas*

### Midgut Targets (Larvae)

11. Microbial disruptors of insect midgut membranes  
*11A: Bacillus thuringiensis,*  
*11B: Bacillus sphaericus*

### Growth & Development Targets (Adults)

7. Juvenile hormone receptor modulators  
*7C: Pyriproxyfen*

### Respiration Targets (Adults)

13. Uncouplers of oxidative phosphorylation via disruption of the proton gradient  
*Pyrrroles*



Insecticide MoA groups listed on the poster are only those that have received WHO Pre-Qualification listing for at least one example.

