**CULTURAL INSECT MANAGEMENT IN WILD BLUEBERRY**

**INSECTS**

- Blueberry Maggot
- Thrips

**METHODS**

- Harvesting
- Management

**INSECTICIDES WITH ENVIRONMENTAL PERSISTENCE**

**GROUP** | **USE & TOXICITY** | **INSECTICIDES** | **ACTIVE INGREDIENT & SIGNAL** | **RATE POUNDS PER TOACRE & SIGNAL** | **PHI days** | **REI hours** | **NOTES**
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1A

**Blueberry Maggot**

- 10.8 oz (0.5 lb ai) for all azadirachtin

**Active Insecticides**

- Bacillus thuringiensis
- Neem, S. Signal

**Control**

- 3 app; 13.5 to 20.5 oz (0.5 lb ai) for all spinosad

**Precautions**

- Avoid contact with eyes or skin. Do not rotate with other insecticides

**Environmental Persistence**

- S = systemic, NS = not systemic

**WARNING**

- High runoff potential after application. Apply at least 7 days apart. See 2ee labels for BMF

**2A**

**Thrips**

- 0.3 lb (0.5 lb ai) for all thrips

**Active Insecticides**

- Diazinon
- Cypermethrin

**Control**

- 3 app; 4 oz to 6 oz per 20 g ai all azadirachtin

**Environmental Persistence**

- NS, 15 day persistence

**WARNING**

- Do not apply more than once every 7 days. Do not apply during bloom or prior to bloom. Apply only when bees are inactive for at least 7 days. See 2ee labels for thrips.

**2B**

**Spotted Wing Drosophila**

- 0.4 lbs of active ingredient/acre

**Active Insecticides**

- Admire Pro Systemic Protections
- Intrepid 2F methoxyfenozide
- Montana 4F

**Control**

- 3 app; 0.5 oz to 1.5 oz per 4 oz to 6 oz (0.5 lb ai) for all spinosad

**Environmental Persistence**

- NS, 1 day persistence

**WARNING**

- Human dermal toxicity is moderate. Apply at least 7 days apart. See 2ee labels for thrips.

**3A**

**THRIPS**

- 1.2 lb (2.0 lb ai) under full leaf canopy

**Active Insecticides**

- Assail 70 WP
- Asana XL esfenvalerate

**Control**

- 3 app; 4 oz to 6 oz per 20 g ai all azadirachtin

**Environmental Persistence**

- NS, 1 day persistence

**WARNING**

- Do not apply more than once every 7 days. Do not apply during bloom or prior to bloom. Apply only when bees are inactive for at least 7 days. See 2ee labels for thrips.

**3B**

**BMF**

- 4 oz (0.45 lb ai total for all azadirachtin)

**Active Insecticides**

- Malathion 8F, Mustang Maxx zeta-
- Diazinon

**Control**

- 2 app BMF (5 lb ai)

**Environmental Persistence**

- NS, 1 day persistence

**WARNING**

- Do not apply more than once every 7 days. Do not apply during bloom or prior to bloom. Apply only when bees are inactive for at least 7 days. See 2ee labels for thrips.

**4A**

**ALL**

- 1.8 lbs of active ingredient/acre

**Active Insecticides**

- 0.15 lbs of active ingredient/acre

**Control**

- 3 app; 1 lb/20 g ai all azadirachtin

**Environmental Persistence**

- NS, 7 day persistence

**WARNING**

- If thrips are present, apply at least 7 days before or after a BMF spray. Do not rotate with other insecticides. Do not spray over 3 lbs ai/acre in a season.

**4B**

**BMF**

- 0.4 lbs of active ingredient/acre

**Active Insecticides**

- 0.5 lbs of active ingredient/acre

**Control**

- 2 app SWD (5 lb ai)

**Environmental Persistence**

- NS, 5 day persistence

**WARNING**

- Do not apply more than once every 6 days, and no more than once every 7 days. Apply at least 7 days apart. See 2ee labels for thrips.

**5**

**FIELD**

- 1.8 lbs of active ingredient/acre

**Active Insecticides**

- 0.15 lbs of active ingredient/acre

**Control**

- 3 app; 1 lb/20 g ai all azadirachtin

**Environmental Persistence**

- NS, 7 day persistence

**WARNING**

- If thrips are present, apply at least 7 days before or after a BMF spray. Do not rotate with other insecticides. Do not spray over 3 lbs ai/acre in a season.

**5A**

**FRUIT**

- 1.8 lbs of active ingredient/acre

**Active Insecticides**

- None

**Control**

- 2 app SWD (5 lb ai)

**Environmental Persistence**

- NS, 7 day persistence

**WARNING**

- Do not apply more than once every 6 days, and no more than once every 7 days. Apply at least 7 days apart. See 2ee labels for thrips.

**6**

**TUNA**

- 0.3 lbs of active ingredient/acre

**Active Insecticides**

- None

**Control**

- 2 app SWD (5 lb ai)

**Environmental Persistence**

- NS, 7 day persistence

**WARNING**

- Do not apply more than once every 6 days, and no more than once every 7 days. Apply at least 7 days apart. See 2ee labels for thrips.

**7**

**BUNCH**

- 0.3 lbs of active ingredient/acre

**Active Insecticides**

- None

**Control**

- 2 app SWD (5 lb ai)

**Environmental Persistence**

- NS, 7 day persistence

**WARNING**

- Do not apply more than once every 6 days, and no more than once every 7 days. Apply at least 7 days apart. See 2ee labels for thrips.

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Please note: THIS REVISED VERSION REPLACES ANY PREVIOUS CHARTS.

**3a.** the likelihood of insecticide resistance developing in targeted pests, growers should rotate between insecticides with different group numbers in the growing season, ideally using multiple group numbers. Products with the same group number should not be used in consecutive sprays.

**3b.** BMF is in blue, SL is in salmon, FB is a flexi-tree, SRW is Strawberry Rootworm, SWD is Spotted Wing Drosophila.

**5.** Systemic, NS is not systemic.