Apricot

Mealy Plum Aphid

Scientific Name: *Hyalopterus pruni*
(Reviewed 11/07, updated 11/07)

In this Guideline:

DESCRIPTION OF THE PEST
Wingless adult aphids are pale green with three dark green longitudinal stripes on their backs. Their bodies are covered with a white, mealy wax. The winged form has a dark thorax and transverse bands on the abdomen. After overwintering in the egg stage near the bases of buds, eggs hatch during bloom and wingless adults develop. Winged adults appear in June and July, as warm weather approaches, and migrate to reed grass or cattails. In fall, winged adults return to apricot trees where wingless females develop and mate with winged male aphids; the overwintering eggs are laid soon after.

DAMAGE
Vegetative growth on the trees may be stunted by high populations, but the principal damage caused by mealy plum aphid is the development of the black sooty mold that grows on the aphid's honeydew.

MANAGEMENT
Several natural enemies are important in the control of aphids in the orchard, but aphid populations may require treatment. Generally small pockets of infestations appear in an orchard before any significant damage occurs on the fruit, allowing time to treat the orchard during the following dormant period. Spring treatments may also be made.

Biological Control
Important predators include lady beetles (especially the multicolored Asiatic lady beetle, *Harmonia axyridis),* green and brown lacewings, syrphid flies, and soldier beetles. However, these predators do not adequately control high populations.

Organically Acceptable Methods
Biological control and sprays of neem oil are acceptable for use on organically grown apricots.

Monitoring and Treatment Decisions
Chemical control of the mealy plum aphid on apricot is seldom necessary. If they were a problem the previous season, eggs are easily killed by insecticide sprays in the dormant period. When control has not been achieved with the dormant treatment, it can be achieved during early May when aphids are present.

Common name (trade name)	Amount to Use** (conc.)	(dilute)	R.E.I.+ (hours)	P.H.I.+ (days)

The following materials are listed in order of usefulness in an IPM program, taking into account efficacy and impact on natural enemies and honey bees. When choosing a pesticide, also consider information relating to environmental impact.

DORMANT or DELAYED DORMANT

A. PHOSMET
(Imidan) 70W — 2.12 lb — 1 lb — 3 days — 14
MODE OF ACTION GROUP NUMBER[1]: 1B
COMMENTS: Apply with a buffer to lower solution pH to 5.0. Has fewer impacts on beneficials and water quality than other materials listed. When applied early in the dormant season, this low-label rate provides effective control and reduces the risk of runoff into waterways, mitigating concerns of surface water pollution. Early applications may not be effective for peach twig borer.

B. DIAZINON* 50WP — 1 lb — 0.5 lb — 24 — 21
MODE OF ACTION GROUP NUMBER[1]: 1B
COMMENTS: Organophosphate insecticides used during delayed dormancy are very toxic to honey bees. Remove bees from orchard if cover crops or weeds are in bloom. Apply diazinon only during dormant or delayed dormant period and do not allow meat or dairy animals to graze in treated orchards When applied early in the dormant season, this low-label rate provides effective control and reduces the risk of runoff into waterways, mitigating concerns of surface water pollution. Levels in surface waters of this material that are high enough to be toxic to certain aquatic invertebrates have occurred following rains in January and February; avoid runoff into surface waters. Early applications may not be effective for peach twig borer.

SPRING

A. NEEM OIL#
(Trilogy) — 2% — — — 4 — 0
MODE OF ACTION: Unknown. A botanical insecticide.
COMMENTS: Repeat applications may be necessary.

B. IMIDACLOPRID
(Provado) 1.6F — 4–8 fl oz — 2 fl oz — 12 — 0
MODE OF ACTION GROUP NUMBER[1]: 4A
COMMENTS: Repeat applications of *any* neonicotinoid insecticide (imidacloprid-Admire, Provado) can lead to resistance to *all* neonicotinoids. Alternate neonicotinoids with an insecticide that has a different mode of action to help delay the development of resistance.

C. DIAZINON* 50WP — 1.5–3 lb — 1 lb — 24 — 21
MODE OF ACTION GROUP NUMBER[1]: 1B
COMMENTS: Avoid drift and tailwater runoff into surface waters. Where apricots are grown adjacent to waterways, do not use this material.

** For concentrate applications, use the amount given in 80-100 gal water/acre or lower if the label allows; for dilute application, amount is per 100 gal water to be applied in 300-400 gal water/acre, according to label.
+ Restricted entry interval (R.E.I.) is the number of hours (unless otherwise noted) from treatment until the treated area can be safely entered without protective clothing. Preharvest interval (P.H.I.) is the number of days from treatment to harvest. In some cases the REI exceeds the PHI. The longer of two intervals is the minimum time that must elapse before harvest.
# Acceptable for use on organically grown produce.
* Permit required from county agricultural commissioner for purchase or use.
[1] Rotate chemicals with a different mode-of-action Group number, and do not use products with the

same mode-of-action Group number more than twice per season to help prevent development of resistance. For example, the organophosphates have a Group number of 1B; chemicals with a 1B Group number should be alternated with chemicals that have a Group number other than 1B. Mode of action Group numbers are assigned by IRAC (Insecticide Resistance Action Committee). For additional information, see their Web site at http://www.irac-online.org/.

PUBLICATION

UC PEER REVIEWED

UC IPM Pest Management Guidelines: Apricot
UC ANR Publication 3433
Insects and Mites
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http://www.ipm.ucdavis.edu/PMG/r5300711.html