

# Pest Profile



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**Common Name:** Citrus Mealybug

**Scientific Name:** *Planococcus citri* (Risso)

**Order and Family:** Hemiptera, Pseudococcidae

**Size and Appearance:**

|                 | Length (mm)                  | Appearance   |
|-----------------|------------------------------|--|
| <b>Egg</b>      | 0.3                          | <ul style="list-style-type: none"> <li>- Eggs are deposited as white cottony masses having the appearance of cotton spread on plants.</li> <li>- The glossy, light yellow eggs are oval.</li> <li>- In groups of 5 to 20.</li> </ul>   |
| <b>Nymph(s)</b> |                              | <ul style="list-style-type: none"> <li>- Nymphs emerge from the ovisacs and typically settle along midribs and veins on the underside of leaves, young twigs, and fruit buttons. They can also be found where two fruits are touching each other or on leaves clinging to fruits.</li> <li>- Wax and honeydew secreted by crawlers are visible indicators of infestations.</li> <li>-The nymphs are yellow, oval-shaped with red eyes, and covered with white waxy particles.</li> </ul> |
| <b>Adult</b>    | 4.5 (males)<br>3.0 (females) | <ul style="list-style-type: none"> <li>- The females are wingless, white to light brown in color, with brown legs and antennae. The body of adult females is coated with white wax and bears a characteristic faint gray stripe along their dorsal side. Short waxy filaments can be seen around the margins of their oval body with a slightly longer pair of filaments present at the rear end of their body. Female mealybugs are wingless.</li> </ul>                                |

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|  |  | - Males are similar in color to females and have two long backward-projecting white wax threads. Adult males are winged. |
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**Type of feeder (Chewing, sucking, etc.):** Sucking

**Host plant/s:** Citrus mealybugs have an extensive host range. Citrus mealybugs are primarily pests of citrus but have been collected from at least 27 host plant families including indoor ornamentals, vegetables, and fruits. Grapefruit is preferred over other citrus varieties. Other host plants include *Amaryllis* sp. (Jersey lily), *Ananas comosus* (pineapple), *Annona squamosa* (sugar-apple), *Asparagus* sp., *Begonia* sp., *Bougainvillea* sp., *Cactus* sp., *Canna* sp. (canna lily), *Citrus* sp., *Cocos nucifera* (coconut), *Solenostemon* sp. (coleus), *Codiaeum* sp. (croton), *Cucumis melo* (muskmelon), *Cucurbita* sp., *Cyclamen* sp. (primrose or Persian violet), *Cyperus* sp. (flatsedge), *Dahlia* sp., *Dioscorea* sp. (yam), *Euphorbia* sp. (milkweed), *Ficus* sp. (fig trees or fig), *Fragaria* sp. (strawberries), *Gardenia* sp., *Impatiens* sp. (jewelweeds or touch-me-not), *Ipomoea batatas* (sweet potato), *Mangifera indica* (mango), *Musa* sp. (banana), *Narcissus* sp. (daffodil), *Nicotiana* sp., *Oryza latifolia* (grass), *Persea americana* (avocado), *Phoenix dactylifera* (date palm), *Psidium guajava* (guava), *Punica granatum* (pomegranate), *Pyrus communis* (pear), *Pyrus malus* (apple), *Rosa* sp., *Solanum melongena* (eggplant), and *Theobroma cacao* (cacao), and *Tulipa* sp. (tulip). Jadhav et al. (1996) reported soybean as a host of citrus mealybug in India. Ahmed and Abd-Rabou (2010) reported that citrus mealybug infested 65 plant species belonging to 56 genera in Egypt.

**Description of Damage (nymphs and adults):** Mealybugs extract plant sap, reducing tree vigor, and excrete honeydew, which gets on plant surfaces and provides a surface upon which sooty mold grows. If a cluster of mealybugs feeds along a fruit stem, fruit drop can occur. Damage is most severe in spring and fall.

Citrus mealybug feeding results in wilted, distorted and yellowed chlorotic leaves, premature leaf drop, stunted growth, and occasional death of infested plants or plant parts. The sugary honeydew secreted by citrus mealybugs falls on leaves and fruits below, resulting in the growth of sooty mold. In addition to its unsightly appearance, sooty mold may degrade fruit quality by reducing the photosynthetic capacity of leaves. Feeding under and adjacent to the button of oranges results in fruit drop, reducing crop yields. Oranges develop hard lumps as a result of mealybugs feeding, resulting in discolored and poor-quality fruit. Development of sooty mold on the fruit leads to commercially unacceptable appearance of fruits and requires vigorous scrubbing before packing the fruits.

#### References:

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