

Taro Root Aphid (*Patchiella reaumuri* [Kaltenbach])

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A serious pest of taro, the taro root aphid (*Patchiella reaumuri* [Kaltenbach]) (Homoptera: Pemphigidae) presently occurs only on the big island of Hawaii within the Pacific region. It is one of the most destructive insect pests of dryland taro. It greatly reduces plant vigor, yield and quality in dryland taro by sucking sap from taro roots. Crop damage up to 75 percent has been observed in some varieties. Extensive aphid damage is frequently coincidental with drought conditions during early plant growth stages. The aphids attack only taro and closely related plants.

The aphid is yellow and is usually covered with a mass of fine cottony and waxy threads. Evidence of infestation appears sporadically as white mold on the fibrous taro roots. When populations are high, aphid colonies are found both on the roots and the basal portions of the leaf sheaths. In other regions of the Pacific, mealybugs may sometimes infest taro roots. These insects have a different appearance, being pink or gray in color and covered with waxy filaments. In cases where identification is in doubt, specimens should be collected in a small bottle, preserved in alcohol, and identified by a specialist.

Control

The aphids spread mainly by planting infested material. It is important to prevent its entry onto other islands. Taro planting material should not be moved from one island to another. If the aphid is on a new island, a survey of the surrounding area should immediately be made. If the infestation is confined to a small area, the taro crops in that area should be immediately removed and destroyed, including all culls and small corms. The ground should be thoroughly deep cultivated. This will drive away ants which may tend the aphids and promote root degradation. A non-taro crop should be planted for a year. The same techniques may also be used in areas of severe infestations.



Taro root with root aphid infestation

If the use of chemicals is required or if additional information is desired, consult an Extension Agent at your local land grant institution. On Guam, you may also consult the Guam Fruit and Vegetable Pesticide Guide for current recommendations and permissible uses.

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