Species of Aphids in the **Commonwealth of the Marianas Islands**

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Aphids are mayor pest in the Marianas islands and threaten local agriculture production in the Commonwealth of the Northern Marianas Islands (CNMI). Aphids are small, soft-bodied insects with long, slender mouthparts with which they pierce stems, leaves and other tender plants leaves to curl up and die. Aphids usually have cornicles on the abdomen that secrete a sticky substance called honey dew. The honey dew falls on the plant and sooty-mold often grows on it. Aphid come in different colors: green, pink, white, yellow, brown or black depending on the species and the plants they feed on. In aphids, adults often don't have wings, but when the colonize new plants. Winged adults are called alates. The alates will establish another colony. Aphids are often found in large colonies on stems or on the underside of leaves. Northern Marianas Islands have multiple aphid species, none of which are known to be native.

Aphids can vector plant viruses that can cause devastating plant diseases such as Citrus, Papaya Ring-Spot virus, Cucumber Mosaic virus and Banana Bunchy Top virus. Ants and aphids have a symbiotic relationship, in other words, they benefit each other. Often, in order to control ants. Aphids are likely to cause serious problems in situations where they are protected from their natural enemies. Aphid natural enemies have been introduced into the Mariana Islands. Often natural enemies are destroyed with insecticides.

For more information contact NMC-CREES Entomology at 234-5498 x1432



Green peach aphid (Myzus persicae) on hot pepper

Aphis gossypii on Taro Leaf

Cowpea aphid (Aphis craccivora)





Banana aphid (Pentalonia nigronervosa)



Myzus persicae on eggplant



Winged aphid (alate)



Parasitized aphid



Syrphid fly adult



Syrphid fly larva



Syrphid feeding on aphids



Lady beetle larvae

















Lady beetle larvae







Adult Lady Beetles

			Control Measures
Scientific Name	Common Name:	Host Plant	Lady beetles, parasitic wasp and syrphid flies have been introduced to the Mariana Islands to control these aphids.
Toxoptera aurantii	Black Citrus aphid	Citrus, cocoa, coffee and others	To encourage biocontrol avoid unnecessary pesticide applications, and plant flowers in your farm near your crops
Aphis gossypii	Melon aphid	Melons, beans and taro	Avoid nitrogen over-fertilization as this encourages the multiplication of aphids Use Neem extract as a spray: Neem leaf Extract: 1lbs Neem Leaves 1.Quart Water 2 Oz. dish soap Blend Neem leaves gently and put them in a pot. Add one quart of water. Cover the pot with a cotton cloth and let stand for 3 days. After three days, strain the extract to get a clear liquid. Dilute in apint of water. Add 2 ounces of dish soap, stir well. Spray on infested plants Yellow sticky traps
Myzus persiccae	Green peach aphid	Hot pepper, okra, eggplant, papaya, beans, bell pepper, melons, etc.	
Aphis craccivora	Cowpea aphis	Beans	
Pentalonia nigronervosa	Banana aphid	Banana, ginger and taro	
Rhopalosiphum maidis	Corn leaf aphid	Corn and potato	
Aphis citricola	Spirea aphid	Citrus and others	1. Tps. dish washing soap 1. Tps. dish washing soap 1/2 cup vegetable oil 1/2 baking soda to 1 gal. water. Spray on infested plants
Cerataphis lataniae	Palm aphid	Betelnut	

Malathion and Sevin work well for aphids

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