

APHIDS—MELON COTTON APHID (*Aphis gossypii*)



Melon Cotton Aphids showing colour variations



Alate or winged form



Aphid damage to young cotton



Description

Melon Cotton Aphid (MCA) attacks a wide variety of plants. As well as cotton and cucurbits, it can attack citrus, aubergines, okra, peppers, carrots and strawberries. In the spring, nymphs feed on the winter host. Alate (flying) forms soon develop and spread to cotton and vegetables. Adults give birth to live females all year round, depending on climate—there is no egg stage.

Not only does it damage plants directly but it also spreads 50 virus diseases (e.g. Tristeza citrus fruit virus, cucumber mosaic, zucchini yellow, and watermelon mosaic viruses). It produces copious honeydew which turns black with sooty mould on fruit and vegetables. The honeydew is very attractive to ants.

Monitoring

Start monitoring MCA after formation of first true leaf, note the number present and also their form: The small yellow aphids develop slowly from newborn nymph to adult and do not produce many offspring; thus, their populations rarely increase rapidly. The larger, darker aphids (green and black) develop more rapidly and the population can grow very fast.

On cotton, light infestations mid-season (20/leaf) do not cause damage, but later, as few as 5/leaf can result in honeydew contamination of lint. In cucurbits, viruses are more problem than the direct feeding of aphids although honeydew can disfigure fruits.

Control

Crop covers are useful for keeping out early infestations on vegetables .

Natural enemies of MCA are many, but they will not prevent virus transmission. Use Neonicotinoids—Imidacloprid, acetamiprid or thiamethoxam. To prevent resistance, use only once per year. Alternate with pymetrozine.

MCA is becoming resistant to synthetic pyrethroids (cypermethrin, lambda-cyhalothrin, bifenthrin), dimethoate, malathion or chlorpyrifos and these chemicals are not recommended for IPM early in the cotton season as