

Banana Aphids and Its Management

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INTRODUCTION

A variety of pests and illnesses can affect bananas and plantains. Once established, some pests and diseases are stubborn and nearly impossible to eradicate, highly aggressive, highly contagious, and easy to transmit. In general, a number of mitigating factors determine the frequency and severity of insect outbreaks and plant damage. Banana insect pests in the Pacific Banana pest insects can seriously harm the fruit (e.g., thrips, moths/caterpillars, scales), leaves (e.g., mites, moths/caterpillars), corms, and pseudostems (e.g., weevils), as well as spread viruses that are harmful to plants (e.g., aphids transmit the banana bunchy top virus). The marketability of banana fruit can be significantly reduced as a result of insect damage.



Due to its capacity to spread the banana bunchy top virus (BBTV), the banana aphid *Pentalonia nigronervosa* is a significant pest of the banana plant. The "honeydew" that aphids excrete serves as a nutritional substrate for the fungi that cause sooty mould, which degrades fruit and physically obstructs photosynthesis. Ant species frequently take care of banana aphid populations.

Banana Aphid

Ants frequently visit the colonies of wingless (apterous) and winged (alates) aphids. Ants consume the honeydew and aid in the aphid's spread. Additionally, during warm days, alate migration over short or great distances contributes to colony spread. Depending on the climate, the number of aphids present, and

the host environment, mature females give birth to live young that mature into alate or apterous adults. Australia most likely has asexual reproduction all year long. Although specific lifecycle information is not yet available, warm weather and the absence of parasites and predators can lead to a significant increase in aphid populations.



Small oval-shaped aphids with a reddish brown to practically black colour. Two distinctive extensions from the back of the abdomen are a feature of aphids. On the pseudostem (of banana plants), behind the leaf bracts and between the bunch bracts and the branch stalk, are colonies of the adult and immature stages. Additionally, colonies can be found under leaf bases close to the ground or in the top unfolded leaves of young plants and suckers. Forewings on wing forms are prominent and contain veins that are darkly coloured. Nymphs are similar to adults but are a little bit smaller and lack wings.

Nymphs

Reddish brown, oval or slightly elongated, and has six segments on the antennae.

Adults

Shiny, little to medium-sized aphids that range in colour from reddish brown to virtually black. They have antennae with six segments and noticeable dark veins. One day after

attaining adulthood, adults begin having children. They can produce an average of 14 offspring per female and can give birth to 4 aphids per day.

Damage symptoms

- ✚ The leaves form a rosette-like arrangement.
- ✚ The upward-rolling and wavelike leaf edges.
- ✚ Produce no bunches.
- ✚ It is a bunchy top disease vector.
- ✚ seen in colonies on the pseudostem and leaf axils.

Management

- ❖ For bunchy top management, chemical aphid control is ineffective, and direct damage is rarely severe enough to require treatment.
- ❖ Aphid populations are often kept low by natural predators like ladybird beetles, hoverflies, earwigs, and lacewings.

- ❖ If the aphid problem is severe, only spray. Avoid frequent spraying because it will eliminate helpful insects and could lead to other pest issues.
- ❖ Ensure sanitised farming
- ❖ Check the prevalence of pests by using healthy, pest-free suckers.
- ❖ Use rhizome to kill ailing plants.
- ❖ Spray 25 EC of methyl demeton.