

# THRIPS AND NEPENTHES

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Thrips (Thysanoptera), when they infest a *Nepenthes* plant, are capable of doing considerable damage; ultimately, if the symptoms are not recognised in time, they are capable of killing a plant. Because of their size and inconspicuous colours, it is quite possible for the insects to pass unnoticed even in large quantities, for they are but 1/25 to 1/50 of an inch long. Depending on the species, they are capable of producing numerous generations during summer. Their mouth consists of a series of delicate piercing stylets enclosed in a short, sucking tube or mouth cone. When feeding, the stylets are first driven into the plant tissue; as the cell sap escapes the minute puncture, the apex of the mouth cone is applied to it and the plant juices are pumped up through the tube by special muscles. During this feeding it is possible for them to spread virus diseases by migrating from infected plants and feeding on healthy ones.

There are many varieties of thrip and judging by some of their characteristic colours I would say that my plants have been attacked by two or more at one time. Their colours are in the browns, reds, greys and black. Infestation by thrips takes on the following symptoms: in some cases the leaves take on a withered, leathery look, the leaves becoming buckled and twisted, tending to die back at the tips. In all cases the new growth is for smaller than previous leaves; as the infestation progresses these new leaves may even take on a yellowy grey appearance.

Thrips live under the leaves and generally the injury can be seen on the underside; it takes the form of "silvering." This silvered effect comes from coalescence of the whitish patches caused by thrips sucking out the cell contents. Large colonies (typical brown or black dots)

can even be seen on this "silvering." In the later stages of infestation the thrips feed on the upper leaf surface. If not checked soon, almost certainly death will occur.

Thrips can prove difficult to control, and generally at least two treatments at least two weeks apart are required, for the eggs are laid within the plant tissue which gives good protection, and this also gives time for pupae in the sack to emerge as adult thrips. I have used Maldison (Malathion) with great success, the concentration used being 1 fl. oz. of 25% concentrated in 1 1/2 gallons water; Dimethoate (Rogor), 1/2 fl. oz. of 30% concentrate in 4 gallons water; and Nicotine Sulphate, 1 fl. oz.; white oil emulsion, 10 fl. oz.; water, 4 gallons.

From personal experience I have found that perhaps even a third or fourth spraying may be necessary to eradicate this pest from the plant; but this can be judged for yourself by keeping an eye on the new growth.

## BIBLIOGRAPHY

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