

Root and Copra Mites



Biology

The relatively big root mite *Rhizoglyphus echinopus* Fum. et Rob. is about 0.7-1.5 mm long, the body is oval and compact, pear-shaped, white and shiny. Legs are brown with strong thorns. Eggs are white, big and are placed on plant parts. High humidity helps the mite to develop more quickly. It lives as secondary pest on roots of already weak or ill plants. It „opens doors“ for pathogenic fungi by destroying the roots and also spreads fungus spores. *Rhizoglyphus* can damage the base of low leaves lying on the substrate. Copra mites of the *Tyrophagus* family have a compact body, are whitish and very hairy. They often live between the leaf sheaths where mass populations are found frequently.

Damage

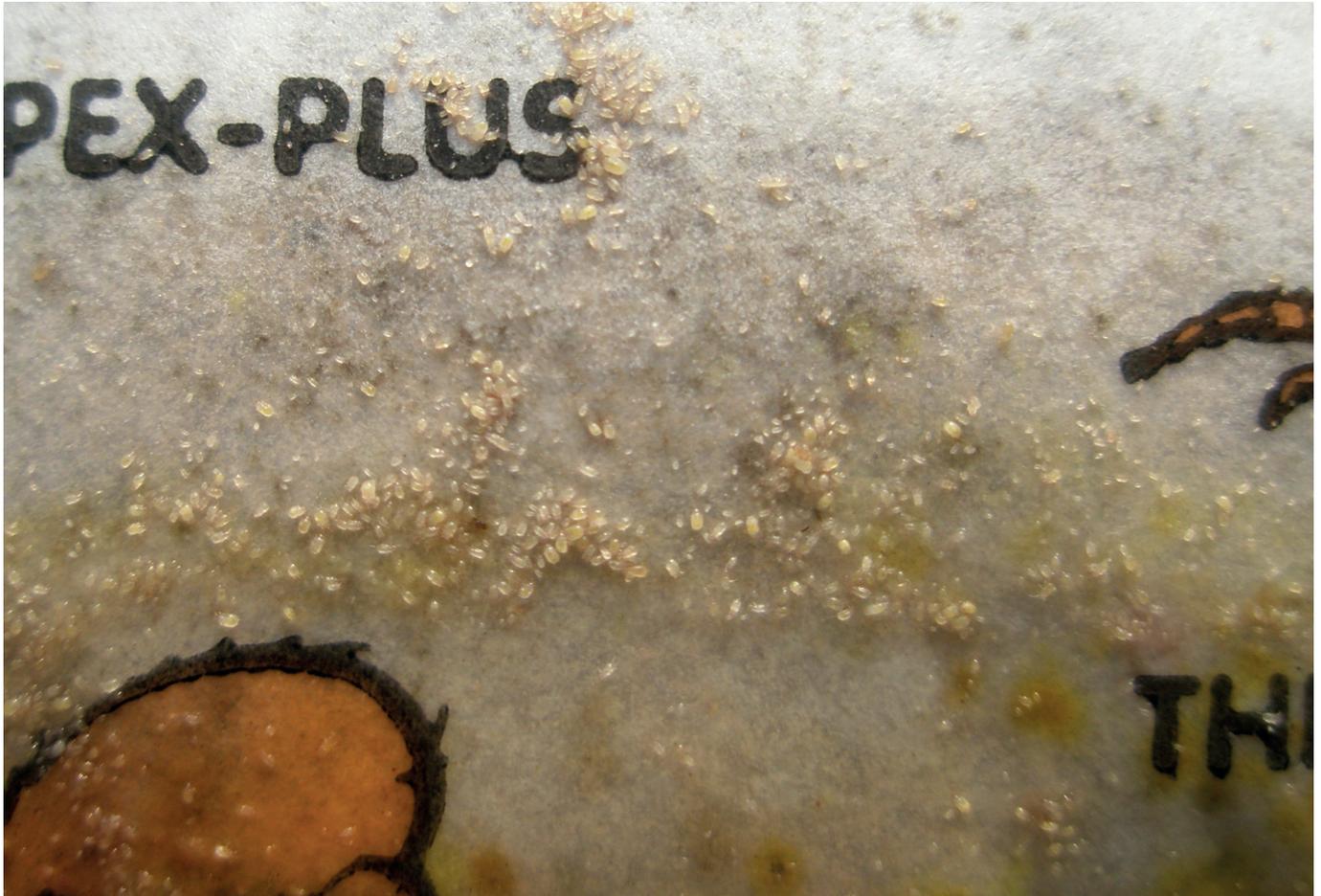
Rhizoglyphus feed on root tissue, epidermis and steles remain intact. In damaged plant parts the ducts with the mites in them are visible. Leaves lying on the substrate may turn brown and be destroyed. *Tyrophagus* can become harmful when mass populations occur and may then also damage healthy plant tissue. Damage on flower stalks, especially of *Paphiopedilum* looks similar to that caused by tarsonemids, with necrotic stripes. Infested leaves become soft and rot.

Control

Direct control of root mites is only possible to a certain extent; dipping the root ball in acaricide solution makes sense only for valuable individual plants because it is expensive. Multiplication can be avoided by optimal cultivation and strengthening of the roots. *Rhizoglyphus* can be controlled sufficiently by common acaricides. Natural enemies of root mites and *rhizoglyphus* that are often found in orchid stands are predatory mites (*Hypoaspis* sp.) and the larvae of gall midges.

Animal pests

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mold mite (Tyrophagus) at predator-mite bag

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