Orchids deseases

Weeds & funghi in the substrate

Weeds in orchids

Ferns are among the most frequent weeds in orchids. They have similar needs to temperatures and humidity as orchids and thus find optimal conditions where orchids are grown. Ferns can be distributed during pricking or potting in greenhouses. Older plants form spores that are distributed in the spray water. To prevent that, young ferns must be removed from the greenhouses.

Marchantia polymorpha L. grows mainly in nutrient-rich pot substrates, it is an indicator for high nutrient supply. Frequently, it comes together with the plants. Once established, the moss spreads when drops of water hit the so-called breeding cups. *Marchantia polymorpha L.* is very sensitive to higher pH values and dry substrate surfaces. Effective agents can be used that selectively effect the moss.

Creeping yellow wood-sorrel (*Oxalis corniculata L.*) is a soil-covering weed with green to dark red leaves and yellow flowers. The plant forms seed capsules from which the seeds are catapulted over a long distance. Therefore, the plant can spread quickly in the stand. As it also forms sprigs above and below the ground, it has good conditions on pot substrates. Creeping yellow wood-sorrel prefers pH values in the slightly sour range. Chemical treatment with herbicides is not possible in orchids.

Funghi in the substrate

Leucocoprinus birnbaumii ([Corda] Sing.) is a saprobiontic soil inhabitant. The fungus is found all over the world in tropical areas where it lives on dead, decomposing organic substances. As the fungus loves humidity and heat, it is often brought into greenhouses where it finds ideal conditions in pot substrates.
Noticeable is the citrus-yellow, 3-5 cm long fruit body. At first it looks like a small cone, later on it opens, dries and gets a greyish colour. The major problem are the whitish sclerotia of the fungus that are ca. 1mm in diameter. In particular, they penetrate through the transparent pots of Phalaenopsis. This considerably reduces the decorative value of the orchids. Due to its water-repellent properties, wetting of the substrate is also made more difficult.

Only hygienic measures help against spreading this fungus. All pots with fungus phases must be disposed of. Direct treatment of the fungus is hardly possible. Early use of fungicides against the spores is the only way to improve the situation.

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HARK ORCHIDEEN

Cambria: moss at young plants

Liverwort (Marchantia polymorpha)

wood sorrel (Oxalis corniculata)

Phalaenopsis: wood sorrel (Oxalis corniculata)

flowerpot parasol (Leucocoprinus birnbaumii), older fruit body

Phalaenopsis: liverwort (Marchantia polymorpha) after treatment

Orchids deseases

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HARK ORCHIDEEN

ferns

flowerpot parasol (Leucocoprinus birnbaumii), young fruit body

flowerpot parasol (Leucocoprinus birnbaumii), sclerotium in bark

ferns

Vanilla: liverwort (Marcantia polymorpha) in young plants