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Common Cultural: Lime-induced chlorosis

Use Integrated Pest Management (IPM) for successful plant problem management.

Biology

Lime-induced chlorosis is a yellowing of leaves caused by alkaline soil conditions. High alkalinity (high pH) of soils can make iron or manganese less available to plants, resulting in symptoms of nutrient deficiency in the leaves. Symptoms are seen on new growth as interveinal chlorosis. Chlorosis may be first noticed at the edges of the leaves and then progress toward the midvein as the condition worsens. In severe cases, only the veins remain green. Plant growing near new concrete or in areas where lime has been applied to "sweeten" the soil may also show symptoms. Plants such as heaths, heathers, azaleas, rhododendrons, and others which prefer acidic soils are likely to be most affected. Plants native to the understory of coniferous forests where the soil tends to be more acidic may also be more susceptible.

Management Options

Non-Chemical Management

- ~ If soil pH issues are suspected, a pH test kit designed for use on soils will provide some information. The most useful of these kits are those which use colored dyes (either the paper strip type or a capsule that is dissolved in water). However, a reputable soil testing lab can provide more accurate and complete information on pH and soil nutrient availability.
- ~ Check proximity of affected plants to newly-poured concrete. New concrete leaches lime into surrounding soils, raising the pH (making it more alkaline).
- ~ Adding sulfur or organic materials, especially conifer needle mulch which is highly acidic, may be beneficial. Work into soil under affected plants carefully to avoid damage to roots. This is a long-term correction and will not show results immediately.
- ~ Apply iron chelate as a foliar treatment to quickly help plants suffering from lime-induced chlorosis. This is a short-term solution and will not correct soil pH issues. Read and follow all label instructions for application of these products.

Select non-chemical management options as your first choice!

Chemical Management

IMPORTANT: Visit Home and Garden Fact Sheets for more information on using pesticides

None recommended

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Images



~ Caption: Lime-induced chlorosis on
rhododendron
~ Photo by: R.S. Byther