

# Mildews on sugar beet

**Powdery mildew (*Erysiphe betae*).** This disease is seen in UK sugar beet crops from late July onwards. The fungus, which is favoured by warm, dry conditions, becomes visible as a light grey film on the upper surface of older leaves. Eventually the entire foliage may become smothered.

Powdery mildew rivals virus yellows as the disease causing most yield loss in UK sugar beet, and control is almost always worthwhile. Recommended fungicides are **sulphur** and some **quinolones, triazoles, and triazoles plus strobilurins**. The triazoles and triazoles plus strobilurins also control rust and ramularia.



**Powdery mildew** on upper surface of leaf

**Downy mildew (*Peronospora farinosa*).** The first sign of this disease is the pale distorted heart leaves in late spring / early summer. On close inspection, a purplish grey fungus can be seen on the underside of these leaves. Some eventually blacken and die, and cracks may then develop in the tap root crown. Later in the season the foliage may turn yellow.

Spread of the disease is more rapid in cool, wet weather. It is rarely of economic importance but occasionally fields are heavily infected. Ideally, potential sources of infection, such as infected groundkeepers on fields that had previously grown beet, should be removed or killed before the beet crop establishes. Once the disease is seen in the crop the only approved method of control is to remove infected plants by hand and destroy them.



Heart leaves distorted and blackened by **downy mildew**



Yellowing produced by **downy mildew** infection