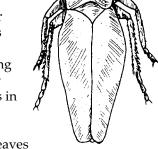
## **LEAFHOPPERS**

## (Macrosteles fascifrons, Empoascus fabae, and Edwardsiana rosae)

## Description

Adults may be greenish-yellow, brown or white with light or dark spots on the head, wings, and thorax. They are from 3.5 mm to 10 mm long and readily jump long distances. Nymphs look similar to adults but are smaller and pale green or white. Adults and nymphs feed by sucking tissue from inside leaves, causing small yellow 'stipples' or larger dead areas. Adults deposit eggs in bark or in leaf veins. Severe damage is seen as stunting, deformation, and stippling of leaves and shoots. Leaves may drop and fungal diseases may enter through holes in bark. In addition, virus may be transmitted between hosts.



## Life Cycle

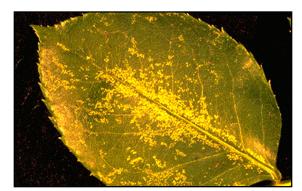
Two to four overlapping generations are produced annually. Eggs overwinter in twigs or stems while adults hibernate in weeds or debris. Nymphs hatch out after the last frost and begin feeding.



Aster Leafhopper



Rose Leafhopper



Rose Leafhopper Damage