



Forest Health Protection, Southern Region

COTTONWOOD LEAF BEETLE,

Chrysomela scripta F.

Importance. - Willows, poplars, aspens, and alders are attacked in the eastern half of the United States. Stunting and multiple-forked tops have been especially severe in intensively managed cottonwood plantations. Damage is most critical during the first 3 years after planting and may cause mortality.

Identifying the Insect. - Adults are about 1/4 inches (6 mm) long. The head and thorax are black, and the margins of the thorax are yellow or red. The wing covers are usually yellowish with broken black stripes, but are sometimes almost pure golden to black. Young larvae are black, but become light to dark brown with prominent white scent gland spots along their sides. Mature larvae reach about 1/2 inch (12 mm) in length. The larvae emit a pungent odor when disturbed.



Typical damage and life stages adults, larvae and pupae.

Identifying the Injury.-The young larvae are gregarious and skeletonize the leaves. Later, they feed separately and consume the entire leaf, except the larger veins. Adults chew holes in the leaves, may attack tender shoots, sometimes killing the terminals, causing reduced growth, stem deformity, or even tree mortality.

Biology.-The adults hibernate under bark, litter, and forest debris. Beetles may be collected in large numbers under or near cottonwood or willow trees in the winter. In the spring, after leaf growth begins, they fly to host trees to feed on the leaves and twigs. In a few days, the female beetles begin to lay their lemon-yellow eggs in clusters of 25 or more on the undersides of leaves. The larvae reach full size and pupate in less than 2 weeks. The pupae attach to leaf surfaces, the bark, or to weeds and grass beneath the trees. The adult beetles emerge after 5 to 10 days. There are six to eight generations per year in the South.

Control. - Under forest conditions, they are often held in check by lady beetle predators which feed on the eggs and pupae. Control may be needed in plantations during the first 3 years. Chemical sprays have been successful in nurseries and young plantations.
