

early spring, are borne in small clusters in the leaf axils of the slender twigs in such profusion as to form conspicuous masses of color. The individual flowers, tubular with five flaring lobes, are 1 to 1½ inches long. The seed pods are brown, flat, less than 1 inch long and contain several small, winged seeds. (Fig. 8.)

Habitat and Distribution.—Carolina-jessamine grows abundantly in open hammocks, but is also found in thickets, swamps and open fields, along fencerows, around stumps, and on rocky bluffs. The vine is most widely distributed in northern Florida, but occurs as far south as Osceola County.

Toxicity.—Yellow-jessamine contains the crystalline alkaloid gelsemine and the amorphous alkaloids gelseminine and gelsemoidine. Other alkaloids have been reported isolated from the plant. These alkaloids constitute the poisonous principles in the plant. They chiefly depress and paralyze motor nerve endings. Depression of the motor neurons of the brain and spinal cord result in respiratory arrest.

The flowers, leaves and roots contain the toxic alkaloids, the greatest concentration being in the roots from which extractions have been made for medicinal purposes.

Cattle, sheep, goats, swine and horses have been reported poisoned by yellow jessamine. Poisoning of cattle by this plant is of considerable importance in the Southeastern states, particularly during the winter months when there is a shortage of desirable green feed.

Single dosages of five pounds of green leaves to a 400-pound steer did not produce typical poisoning attributed to yellow-jessamine as observed in the field. The feeding of 180 grams of fresh green leaves to hens over a period of 15 days resulted in death in 20 to 26 days, with no indications of symptoms until four or five days before death. This would indicate that the poisonous principle is cumulative and that animals must eat the plant over a period of time before poisonous effects are observed.

Symptoms.—Under range conditions animals poisoned by this plant usually are not found until they are "down." Early symptoms consist of muscular weakness, staggering gait and dilation of the pupils of the eyes. As weakness progresses rapidly the animal "goes down" and death usually occurs in 24 to 48 hours. During this terminal period convulsive movements of the head and legs occur frequently. The pulse is feeble, respirations are reduced and the temperature usually is subnormal. Animals