

has been widely planted as an ornamental and to a less extent as a crop plant. From these plantings, seeds have been scattered widely all over Florida. It is common on rich soil in gardens, around dumping grounds and in the Everglades around Lake Okeechobee.

Toxicity.—Castor-bean contains a poisonous principle, ricin, which is a true protein.

All parts of the plant, particularly the beans, are toxic for all classes of livestock. Castor pomace contains the toxic principle and should not be used as feed for livestock.

Symptoms.—The symptoms of poisoning in horses, cattle and sheep are similar. Nausea, violent purgation which is sometimes bloody, and general toxic symptoms are observed. In case of prolonged illness, muscular tremors, general weakness and emaciation occur.

Prevention.—Livestock seldom eat the plant or beans when sufficient desirable feed is provided.

Treatment.—No specific treatment for castor-bean poisoning can be recommended.

Elderberry

Description.—Elderberry (*Sambucus canadensis* L. and *S. simpsoni* Rehder), (Fig. 20) is a weak shrub or small tree 20 feet or less tall, often forming thickets of considerable extent. The leaves are in pairs, each leaf consisting of 5 to 11 leaflets, with the basal leaflets divided into smaller leaflets in the Florida species. The flowers are tiny but borne in large flat-topped clusters on the ends of the branches. The flowers and the purple fruits that come later are about $\frac{1}{8}$ inch in diameter. Flowers and fruits are often found on the bushes at the same time.

Habitat and Distribution.—Elderberries usually grow in full sunlight on moist soil. They may be found almost anywhere in the state but are most common in swamps, along streams and in the Everglades.

Toxicity.—It has been reported that the fresh leaves, flowers, uncooked berries, and particularly the roots of elderberry contain a glucoside which is capable of producing small amounts of hydrocyanic acid. Cooking the berries is said to destroy the cyanogenetic glucoside. The plant has a bitter taste imparted to it by the presence of an alkaloid.