

the next season and the other may not grow until several years later. Each seedling has two thick, fleshy, dark green seed-leaves about 1 inch long. (Fig. 1.)

Habitat and Distribution.—Cockleburrs occur most commonly in old fields, but also in more recently cultivated soil, especially in low areas. They also occur along ditches, streams and roadsides. The weed is most common in the central, northern and western areas of Florida.

Toxicity.—The germinating seeds and young seedlings contain the highly poisonous glucoside, xanthostrumarin. Young seedlings are extremely rich in this toxic principle and are dangerous to all classes of livestock. At this stage of growth they have two long, rather narrow, pointed leaves which appear entirely different from the mature cocklebur leaf. Thus, they often are not recognized. As the plant develops from this stage it gradually loses its toxicity. The mature plant has a bitter, disagreeable taste and animals usually will not eat it.

There is some question as to whether the dormant seeds of cocklebur are poisonous. They are covered with a spiny bur and animals do not consume them readily. Occasionally, young pigs have been known to eat the seeds, which sometimes cause choking and produce an inflammation in the stomach. However, extensive losses in swine never have been attributed to eating cocklebur seeds. Considerable loss in the value of graded wool is reported each year as a result of cockleburrs becoming entangled in the wool of sheep. Extensive irritation of the sheath of steers and bulls occasionally occurs as the result of masses of cockleburrs becoming embedded in the hair in this area.

Cocklebur poisoning occurs chiefly in the early spring as a result of animals, particularly hogs, eating young plants in the cotyledon stage. The plants usually are found on low, wet land which has recently dried. Under these conditions a large number of seeds sprout over a short period. These young seedlings often constitute the only available green material for grazing at the time. In the early spring hogs usually are hungry for green vegetation. Cocklebur seedlings are succulent and apparently palatable, as hogs eat them with relish, even though the animals are well fed otherwise.

One-quarter to $\frac{1}{2}$ pound of the seedlings consumed over a short interval will kill a 30- to 60-pound pig in 6 to 24 hours. Smaller quantities consumed over a longer period often result