Weed focus: Sicklepod

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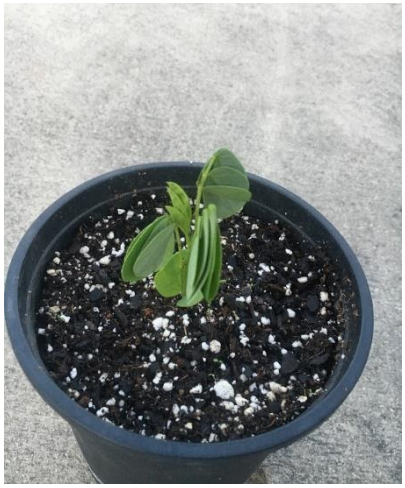
A native plant in the tropical regions of the Americas, sicklepod (*Senna obtusifolia* L.) is a legume and member of the Fabaceae family. Although it is a legume, it does not fix nitrogen. It can be found throughout the southeastern USA. The plant is common in disturbed soil and individuals may reach 5 to 6 feet in height. The plants lack hairs (glabrous), and the stems are branched. Leaves are compound and comprising 4 to 6 leaflets that are egg-shaped and pinnate (opposite one another) along the midvein. Leaves increase in size as their distance from the main stem increases (photo top right). The leaves of sicklepod exhibit nyctinastic movement, meaning they close up at night or during drought stress (photo below).



Sicklepod is a warm-season annual that begins from seed each year. It has yellow flowers that resemble those of other Fabaceae. Seeds form in green pods that are narrow and long, reaching 5 to 6 inches in length, and which are sickle-shaped, giving this plant its common name (photo bottom right). The pods turn brown when ripe and burst open, releasing the seeds. Seeds are ground and used as a coffee substitute in some parts of the world, and they are also used medicinally as a laxative.

Sicklepod is most often found in disturbed soil, so it is common in row crop fields. It can also be found along fence rows, in feeding areas, or other bare spots in pastures. Livestock generally avoid it when adequate alternative forages sources are available. If consumed, all parts of the plant are toxic, whether fresh or dry. Seeds seem somewhat less toxic than the vegetative parts of the plant. Ingestion of large quantities over multiple days causes impaired liver, kidney, and muscle function. Symptoms of poisoning include diarrhea, muscle tremors or weakness, and dark urine.

There is no antidote so the plant can be lethal. The toxic agent is unknown. Because of these characteristics, it is recommended that this plant be excluded from green chop, silage, and hay harvests since livestock may not be able to sort it out before consuming the final product.

Controlling sicklepod in pastures: Since sicklepod seeds can spread via shoes and equipment, the first step in control is cleaning surfaces when equipment has been in infested areas. If the infestation is small, plants can be uprooted; however, sicklepod has a taproot and the entire root must be removed, or the plant will regrow. Mowing is a very important form of mechanical control. Because of its erect growth pattern, sicklepod does not tolerate frequent mowing, which prevents seed production by sicklepod and favors a progressive reduction of its populations in a pasture. If chemical control is necessary, young plants respond well to 2,4-D application; however, more mature plants are less responsive. Dicamba with 2,4-D is also effective. Applications must be done before sicklepod plants are 12 inches tall.