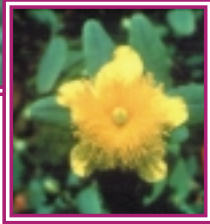


St. John's wort *Hypericum* spp.



Seeds brown, 1 to 1.2 mm long. Found throughout the South; in dry fields, waste places, roadsides, mostly in Piedmont or mountains. [Inset: flower]

Erect, diffusely branched perennial herb; smaller stems wing-angled. Leaves opposite, elliptic to oblong, usually five-veined, 1 to 2.5 cm long, 2.5 to 11 mm wide, entire; leaves with tiny, nearly clear spots, base clasping, sessile. Flowers deep yellow; petals 7 to 10 mm long, with tiny, black spots, borne in decumbent, flat-topped clusters. Fruit, a many-seeded capsule, ovoid, 3.5 to 5.5 mm long, 2.5 to 4 mm broad.

Toxicity

A red fluorescent pigment, hypericin, is the toxic agent. It is a primary photosensitizing compound, but the liver is not affected. Cattle, sheep, and horses are affected; goats are also affected, but to a lesser degree. Animals are poisoned by eating the fresh plant or dried hay. The toxic principle is not destroyed by drying or excessive heat. Younger plants are more palatable than the older ones.

Symptoms

In cattle, consumption of the plant equal to 1 percent of the body weight is toxic. Photosensitization is noticed within 2 days to 3 weeks after ingestion. Light areas of the skin surface become hypersensitive to sunlight. The white skin peels off and may hang from the body before falling away. Affected animals exhibit itching and try to scratch themselves on objects. Blindness often results from inflammation and secondary infection of the cornea. Animals occasionally have convulsions in the acute form of poisoning. More commonly, however, the photosensitization results in secondary infection of the affected areas. Animals may actually die of starvation.

Treatment

Remove animals from contaminated pastures to barns, woods, pasture, or areas where animals have access to shade. Treat affected skin areas with antibacterial preparations; administer antibiotic injections to prevent infection.