Protection Report R8-PR 37 July 1999

Kudzu Pueraria montana

Plant: Twining and trailing semiwoody vine, I O-30 m (35–100 ft) long, with rope-like vines covering mature trees and forming dense patches, having 3-leaflet leaves on hairy petioles and stems, deciduous and dying with first frost, yielding fragrant red-purple flowers in midsummer. and hairy flat capsules with few seeds in fall. Large, semi-woody tuberous roots reaching depths of I-S m (3–16 ft).

Stem: Round, trailing or climbing by twining on objects less than IO cm (4 in) in diameter. infrequent branching; young stems yellow-green with dense-erect golden hairs and upward matted silver hairs; aging to rope-like. light gray. and hairless: and eventually rough-harked, rigid, and usually dark-brown, up to IO cm (4 in) in diameter and larger. Frequent unswollen nodes, rooting at nodes when on ground or buried.

Leaves: Alternate. compound with 3leaflets. Leaflets 8-1 8 cm (3-7 in) long and 6–20 cm (2 1/2–8 in) wide, usually slightly lobed (or unlohed in

shade), middle leaflet symmetric. 2-lobed; side leaflets 1-lobed. light tan on upper side, tips pointed. Margins hairy with tine. golden hairs. Leaf stalks IS-30 cm (h-12 in) long, long-hairy, with swollen bases having two *stipules*.

Kudzu-infestation



Kudzu-leaves



Kudzu-flowers



Flowers: June–September. *Axillary* spike-like clusters (*racemes*) 5–30 cm (2–12 in) long. Pea-like flowers with petals lavender to wine-colored. Flowers in pairs (or three's) from raised nodes spirling up the stalk, opening from the base to top, on brackted short hairy *pedicels*.

Fruit and Seeds: September–January. A dry, flatened leguminous pod (bulging above the seeds), 3–5 cm (1 1/4–2 in) long and 8–10 mm (5/16–3/8 in) wide, tan with stiff golden brown hairs, splitting on 1–2 sides to release a few ovoid seeds. Seeds 3 mm (1/8 in) long, light brown with tan dots, only a snall percentage filled or viable.

Authored and photos by Dr. James H. Miller, Southern Research Station. (Added photos by Ted Bodner)

Range: Eastern U.S. in scattered infestations.

Ecology: Nitrogen fixer. Vines root at nodes when in contact with the ground (*stoloniferous*) yielding new plants when connecting vine dies. Forms dense mats over the ground, debris, shrubs, and trees. Matted dead leaves persist during winter. Occurs in old infestations, along rights-of-way and stream banks, spreading outward.

