BLACK-EYED SUSAN Rudbeckia hirta L.

Description: Black-eyed susan is an annual or short-lived perennial herb. It has hairy, ovate to lance-shaped leaves and stems which are scratchy to the touch. The yellow flower heads may be up to 3 inches in diameter and have purplish to black centers. It typically flowers from June to July. Fall germinating seedlings and perenniating plants overwinter as a low-growing rosette of leaves.

Uses: This plant is used mainly for landscape beautification. It has potential for use in cultivated, garden situations, in naturalized prairie or meadow plantings, and along roadsides.

Site adaptation: Black-eyed susan prefers full sun, but can be grown in light shade. On sites that are heavily shaded, plants produce few flowers and become tall and leggy. It is adapted many soil types, but prefers a well-drained soil. It generally will not persist on poorly drained sites. When growing on rich soils, high in organic matter, plants produce rank growth and are subject to wind or rain damage.

Cultural Specifications

Method of establishment: Seed or transplanted seedlings.

Planting time: Seed can be sown almost any time during the growing season, but late summer planting (August-September) often produces the largest stands. Transplants are generally planted in the spring, after all danger of frost is past.

Seedbed preparation: A firm seedbed is required. Seed may be planted into a closely mowed, chemically-killed, or burned sod area with a light disking or harrowing that scratches the soil surface. A thick layer of plant residue on the soil surface will interfere with seed germination. Light disking to incorporate ash residue is essential on burned areas or else seed germination may be delayed or inhibited. When seed is sown on a clean-tilled site, cultipacking the soil before planting is recommended.

Planting rate and method: Broadcast or shallowly drill 1-2 grams seed per 100 square feet (1-2 lb/acre). Seed should be placed close to the soil surface. Cultipacking after planting will ensure good seed to soil contact. Seed germination usually occurs by fall, but occasionally may be delayed until spring. Spring germinating plants do not begin flowering until later than normal and generally continue flowering until frost.

Greenhouse production: Seed should be planted indoors or in a cold frame in late winter. The potting medium should be sterile and well-drained. The seed should be only lightly covered and the medium kept moist, but not wet, until germination. After germination allow the surface of the soil to dry between waterings to prevent seedling rot. Transplant

the seedlings into larger containers when they have 3-4 true leaves. A weekly application of a soluble complete fertilizer is recommended. Seedlings are ready to plant on the growing site 8-10 weeks after sowing. Prior to planting, seedlings should be hardened-off by placing them outdoors in a shady location for approximately one week.

Fertilizer requirement: Apply according to soil test recommendations. If not available, a rate of 3.5-5.5 oz per 100 square feet (100-150 lb/acre) of 13-13-13 should be applied after the seedlings are established and annually thereafter.

Companion plants: Black-eyed susan is usually found growing in mixed stands with many different types of plants. Some suggested companion plants are: clasping coneflower, lance-leaf coreopsis, butterfly milkweed, purple coneflower, gaillardia, and ox-eye daisy. Grasses will be a major component of most naturalized and roadbank plantings.

Management

Mowing: If necessary, plants can be mowed in the spring before stem elongation begins in April. Later mowings should be delayed until the plants have set seed in late July to early August. This summer mowing often encourages some plants in the stand to produce a second flush of flowers, and flowering will continue sporadically until frost. A fall mowing in early November is also recommended.

Seed production: Seed will begin to mature about a month after flowering when they turn dark gray in color. However, harvest will be easier if delayed until the fruiting head (cone) becomes loose and the color turns to dark gray. At this stage, the seed easily shakes free from the cone. Seed can be collected by hand or large areas can be harvested with a conventional combine.

Additional information: Phillips, H. R. 1985. Growing and propagating wild flowers. Univ. of North Carolina Press, Chapel Hill.

Prepared by: USDA, Natural Resources Conservation Service Jamie L. Whitten Plant Materials Center Route 3, Box 215-A Coffeeville, MS 38922-9263 Telephone (601) 675-2588 FAX (601) 675-2369

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