

NEW AND/OR UNDER-USED ANNUALS

John Erwin
University of Minnesota

It was my responsibility to select materials to be grown for the annual trial gardens at the University of Minnesota this year. Looking through the books on annual production I was amazed at the variety of plant material that is available which is not grown commercially.

Our customers are 'crying out' of more variety. I took a half a dozen 4" potted *Nemesia* plants to a local greenhouse to allow them to finish the plants to see how they like them. Unfortunately, the salesman did not know that the plant were to be kept and sold them...for \$4.50 a pot wholesale after only 4 hours!! People 'snatch up' anything different. They want variety in their gardens. Offering new and/or unique annuals for customers could increase your sales.

This year we decided to evaluate both existing popular annuals and annuals that are under-utilized and/or new annuals in the trial gardens. Some of the annuals that 'stand out' are listed below. Additional cultural information can be obtained by writing me. In addition to the annuals mentioned below, complete information of which plant materials did well in the trial gardens this year will be available this fall.

Latin Name - *Dolichos lablab*

Common Name - Hyacinth bean

Habit - The hyacinth bean is a vigorous vine (usually to 15 feet) with purple tinted compound leaves composed of 3 leaflets. The plant has fragrant white/purple flowers (3/4" long) which form flat maroon seed pods after fertilization.

Culture - Germinate seed 4-6 weeks prior to marketing in northern climates. Soak seed overnight in warm water prior to planting. Germinate plants at constant 72-74°F medium temperature. Grow plants at constant 65-72°F. Provide a lattice for support. Plants will flower 16 weeks after being sown. Fertilize weekly with 100-0-100 ppm N-P-K through the irrigation water. Since hyacinth bean is a legume, it assimilates nitrogen into the soil, there-

fore, heavy feeding is not necessary. *Dolichos* plants prefer warm conditions (>65°F) and full sun.

Latin Name - *Lavatera trimestris*

Common Name - Tree/Rose Mallow

Habit - Small plant/shrub (2-3 feet tall) which blooms profusely from late-July to frost. Flowers resemble those of hibiscus, are 3-4" wide and are rose, pink (Silver Cup), or white (Mont Blanc) in color.

Culture - Sow seed in mid-March after soaking seed overnight in warm water, i.e. about 6 weeks prior to marketing date. Seed germinate in 7-14 days. Transplant seedlings to 4" pots after 2-3 weeks. Fertilize plants with continuous liquid feed of 200-0-200 ppm (N-P-K) through the irrigation water. *Lavatera* prefers high fertility but excessive fertilization will encourage foliage at the expense of flowering. Grow in partial sun in moist, well drained and/or sandy soil outdoors. In general, *Lavatera* prefers moderate temperatures outside (55-80°F).

Latin Name - *Rhodochiton atrosanguineum*

Common Name - Purple Bell Vine

Habit - Hanging/vining crop that produces flowers with a red downward hanging calyx with a 1 inch long purple tubular flower hanging below the calyx. The calyx persists after the flower withers. Vines grow 10-15 feet long with time.

Culture - Germinate seed in early March at constant 72-78°F medium temperature. Fresh seed will germinate in 7-14 days. Older seed germination is erratic and can take as long as 40 days. Transplant seedlings after 3 weeks into 4" pots. Fertilize young seedlings with 200-0-200 ppm (N-P-K) weekly through irrigation water. *Rhodochiton* grows well in full sun or partial shade

Our customers are 'crying out' of more variety.

in moist well drained soil with warm temperatures (>65°F).



Latin Name - *Solanum jasminoides*

Common Name - Potato Vine

Habit - Upright vine best suited as a container plant with a pillar for support in northern gardens. In southern gardens, this annual can become a weed. Clusters of long-lasting fragrant white flowers are produced continuously throughout the summer when plants are grown in full sun with warm temperatures.

Culture - Germinate seed in December or January in media maintained at constant 68-70°F. Transplant seedlings to 4" pots after 2-3 leaves have formed. Grow plants on with constant 68-80°F. Growth will be slow unless plants receive warm temperatures.



Latin Name - *Heliotropium arborescens*

Common Name - Heliotrope

Habit - Compact dark green leafed plant (2-4 foot final height) with fragrant white, lavender or dark purple flowers.

Culture - Start seed 10-12 weeks prior to marketing date. Germinate barely covered seed (light aids in germination) with a 70-75°F medium temperature. Transplant seedlings to a 4" pot and finish crop at constant 68-74°F air temperature. Grows best in rich well drained soil with morning sun. Direct afternoon sun is detrimental. Heliotrope prefer warm temperatures.



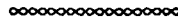
Latin Name - *Torenia fournieri*

Common Name - Wishbone Flower

Habit - Highly branched compact plant that grows to 6-10 inches tall. Purple and/or pink flowers with a yellow blotch are borne in stalked clusters in leaf axils.

Culture - Start seeds 8-10 weeks prior to marketing date. Germinate lightly covered seed (light

enhances germination) with a 70-75°F medium temperature. Transplant plants after 2-3 leaves have formed. Finish crop with a constant 68-72°F air temperature. Prefers warm semi-shady humid summer conditions with protection from direct afternoon sun.



Latin Name - *Cuphea ignea*

Common Name - Firecracker Plant, Cigar Flower

Habit - Mounded plant reaching 8-15 inches in height with narrow leaves and tubular orange and black flowers.

Culture - Start seed 8-10 weeks prior to marketing. Seed germinate in 8-10 days when media temperatures are maintained at 75-78°F. Seed germination requires light. Transplant germinated seedlings to a 4" pot or in a hanging basket after plants are 2-3 inches tall. Maintain air temperatures between 68-76°F. Pinch the shoot tip to encourage branching. Fertilize with regular applications of 200-0-200 ppm fertilizer (N-P-K) supplied through the irrigation water. Plants can tolerate hot and humid conditions.



Latin Name - *Kochia scoparia* var. *tricophylla*

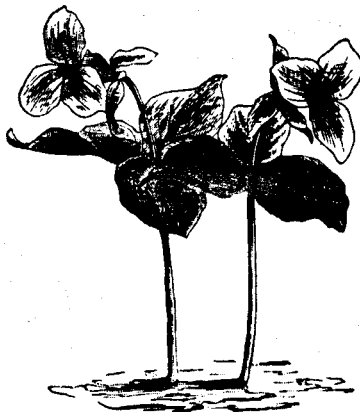
Common Name - Summer Cypress, Burning Bush

Habit - High, bushy to globe-shaped plant reaching 2-5 feet in height. The burning bush is grown for its foliage. Light green, narrow leaves are extremely numerous on the stem and are almost hairy in appearance. Leaves turn purple-red in the fall. Flowers are inconspicuous.

Culture - Sow seed 10 weeks before marketing. Germination requires 6-10 days when media is maintained at constant 72-75°F. Light enhances germination. Transplant seedlings to a 4" pot after 2-3 weeks. *Kochia* prefers warm temperatures (>65°F) and full sun. It is important that plants are not stressed during production to maximize leaf unfolding rate in order to achieve adequate height for sale as a 4" bedding plant crop.

This year we decided to evaluate both existing popular annuals and annuals that are under-utilized and/or new annuals in the trial gardens.

This bulletin was compiled and edited by Dr. John Erwin, Assistant Professor and Floriculture Specialist, and Debra Schwarze, Extension Floriculture Assistant, Department of Horticultural Science, University of Minnesota, 1970 Folwell Ave., St. Paul, Minnesota 55108. Phone: 612-624-9703 or 612-624-0736, FAX: 612-624-4941. Opinions and opposing comments regarding the contents of this bulletin are welcome and encouraged. This bulletin is published in cooperation with the Minnesota Commercial Flower Growers Association and the University of Minnesota Extension Service. The bulletin is distributed to members of the Minnesota Commercial Flower Growers Association. Questions regarding membership in this organization should be directed to Dan Totushek, Dan & Jerry's Greenhouse, 3870 20th St. NE, Buffalo, MN 55313. Phone: 612-375-0264.



Issued in furtherance of cooperative extension work in agriculture and home economics, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture. Patrick J. Borich, Dean and Director of Minnesota Extension Service, University of Minnesota, St. Paul, Minnesota 55108. The University of Minnesota, including the Minnesota Extension Service, is committed to the policy that all persons shall have equal access to its programs, facilities and employment without regard to race, religion, color, sex, national origin, handicap, age, veteran status or sexual orientation.

MINN. COMMERCIAL FLOWER GROWERS ASSN.
MINNEAPOLIS, MN 55404

BULK MAIL
U.S. POSTAGE
PAID
ST. PAUL, MN
PERMIT NO. 4170