Nature of Work: New plants and cultivars are needed to fuel the growth of the nursery industry. Numerous species and selections have been brought to the Center for Applied Nursery Research since 2003. In general, plants are shifted into appropriate sized containers using the following substrate and are grown under standard conditions: 6:1 pinebark and sand amended with (in lbs. per cu. yd.) dolomitic limestone (4.0), Micromax (1.5), Gypsum (1.5), Osmocote Pro 18-8-8 (14.0), and Talstar (2.0).

Results and Discussion: The following plants died or were removed from the trials for various reasons in 2005: Aristea major, Aster ageratoides, Aster kantoensis, Beschorneria yuccoides, Clinopodium chinense, Dianthus japonicus, Eupatorium chinense, Genista canariensis, Geranium maderense, Silene diocia, and Tephrosia grandiflora.

Acacia fimbriata is an attractive species of wattle native to Australia. A plant in Tifton has been cold hardy to 14F and flowers profusely in February. Thirty seedlings were shifted from liners to #3 containers in April. Height was measured in November. Mean height was 42" with a range from 14" to 62" with a standard deviation of 10.8. Several seedlings will flower in 2006. Many visitors commented on the attractive foliage and form of these plants. Plants were shifted in #15's in November of 2005.

One plant of Berberis kunmingensis was grown in a #3 container and reached a height of 21". This plant has been transplanted into the field for further evaluation. A hybrid selection of Campsis which has been under evaluation at CANR for several years will be released in the future.

Three cuttings of Deutzia taiwanensis (2-6) were grown in #3 containers and were planted in the field trial in November. This species blooms heavily in April and remains attractive throughout the summer when other deutzia’s have defoliated. Dissotis pulchra is a relative of the commonly grown Tibouchina. Plants grew vigorously but did not flower. One plant has been kept and moved inside for the winter. Eurya japonica seedlings showed differing rates of growth and susceptibility to leaf spot. The compact nature of the plants and dark green foliage is attractive. As there has been no interest in these plants they were discontinued.

One yellow-foliaged seedling selection from Ilex xattenuata ‘Sunny Foster’ was planted in the field. The foliage is more like Ilex opaca than I. cassine. A dwarf selection of Ilex cornuta was grown in #3 containers. Plants averaged 10" in height and are female. While the parent plant is very attractive and would be a good replacement for ‘Carissa’ in the landscape, the plants may grow too slow for container production. A male selection of Ilex xwandoensis with attractive
foliage and a mounding form has also been planted in the field trials. Two selections of *Illicium parviflorum*, Morman Branch and 1.1a were planted in the field, while selections 1.3a and 2.4 were removed from evaluation.

Several seedling batches of Nandina were grown out. Parental selection made a difference in height of the seedling populations. Seedlings of ‘Harbour Dwarf’ (n=62) ranged in height from 1.0” to 21.0” with a standard deviation of 7.0”, indicating a good deal of variability. Seedlings are being selected for compact form, branching, fall color, and sterility.

One plant of *Philadelphus schrenkii* was planted in the field. Plants in general grew poorly in containers. *Rhaphiolepis* seedlings from several cultivars are being evaluated for fall color, flowering, and disease resistance. One variegated seedling of *Syringa tomentella* was transplanted to the field.

New plants under consideration for 2006 include seedlings of *Campanulastrum americanum*, *Euonymus carnosus* (small tree with maroon fall color), and an F1 population from crossing *Campsis grandiflora* ‘Morning Calm’ with our selection of trumpet creeper.

**Significance to Industry:** Certain plants are available for grower evaluation by signing a trial agreement. See Donna Heaton for details.