Results of Herbaceous Annual Plant Trial Gardens at the Cincinnati Zoo and Botanical Garden, 2004

David E. Dyke and Steve Foltz

Ohio State University Extension - Hamilton County, the Cincinnati Zoo and Botanical Garden (CZ&BG), and the Cincinnati Flower Growers Association (CFGA) collaborated on demonstration/trial gardens at the CZ&BG in 2004. This was the third year of these collaborative trials.

The gardens were designed by Steve Foltz. Participating seed companies included Pan American Seed Co., Ball Floral, and Proven Winners. These companies provided plugs or seeds, which were then grown in 4-inch pots or flats by members of CFGA and by the CZ&BG. More than 13,000 plants of 150 varieties were planted for the trials. All varieties in the trials were labeled for easy identification for the 1.2 million visitors to the Zoo in 2004.

Three goals were set for the gardens. The first was to evaluate herbaceous annuals on the basis of quality and performance as seen in the late summer in order to determine which should be recommended for planting in area gardens.

The second was to provide the general public and commercial growers and landscapers an opportunity to observe many varieties of the latest, yet fairly well-proven, annuals available that were professionally grown in attractive garden settings (including in planters).

The third was to promote those annuals that performed well enough to be recommended for planting in area gardens.

Plants were planted in beds that were tilled with minimal compost added. Most beds were equipped with an automatic irrigation system. Those that were not were irrigated with a temporary spray stake system.

A liquid feed fertilization program was used, consisting of fertilizing with a balanced fertilizer at planting and then at two-week intervals until good color was maintained, then as necessary to maintain good color. No pesticides were used.

Plants were evaluated by members of the organizations involved in the trials on July 8 and August 20. All plants were evaluated on a scale from 1 to 5, in which 1 = poor, 2 = fair, 3 = good, 4 = very good, and 5 = excellent. Plants were rated on overall appearance. Factors considered included plant health (including insect and disease damage), color, presence, and vigor. Plants that rated poor were taken off the evaluation list.

The weather was generally favorable for good plant growth throughout the
2004 growing season. However, some quite unusual growing challenges were encountered, including peacocks, ducks, and rabbits walking through the beds and/or eating plants. Also, more than a million people were walking by the beds — and sometimes not staying on the path. Therefore, some plants in the trials that did not make the recommended list may be quite good for the area but were removed from the trials due to one or more of the problems cited here.

The Top Picks of 2004 are listed here. These were outstanding plants that provided high impact with minimal effort. The additional annuals of note were also excellent plants that should be recommended for planting in the home landscape.

**Top Picks of the Zoo’s Annual Trials, 2004**

*Coleus ‘Freckles’*
*Coleus ‘Cranmore’ and ‘Religious Radish’*
*Coleus ‘Dipt in Wine’*
*Impatiens Infinity™ Series ‘Cherry Red’ and ‘Pink Kiss’*
*Impatiens Fanciful™ ‘Mix Hawaiian’ and ‘Salsa’*
*Zinnia angustifolia ‘Star White’*
*Angelonia Angelface™ ‘Blue’*
*Lantana Patriot™ Classic™ Firewagon*
*Ipomoea batatas ‘Black Heart’*
*Scaevola New Wonder®*

**Additional Annuals of Note, Zoo’s Annual Trials 2004**

*Coleus ‘Felix’*
*Coleus ‘Saturn’*
*Coleus ‘Amora’*
*Coleus ‘Sunset’*
*Phlox Intensia™ ‘Lavender Glow,’ ‘Lilac Rose,’ ‘Neon Pink’*
*New Guinea Impatiens ‘Celebrette Hot Pink’*
*New Guinea Impatiens ‘Celebrette Orchid Star’*
*New Guinea Impatiens Fiesta™ ‘Appleblossom’*
*New Guinea Impatiens Fiesta™ ‘Burgundy Rose Double’*
*Spilanthes ‘Peek-a-Boo’*
*Canna ‘Red Stripe’*
*Ipomoea Tricolor (Sweet Potato Vine)*
*Impatiens Showstopper Series*
*Angelonia Angelmist™ ‘Orchid’*
*Plectranthus ‘Niccolletta’*
*Black-Eyed Susan Vine*
*Hyacinth Bean*

New trial gardens are planned for 2005.

For more information, contact Steve Foltz at the Cincinnati Zoo and Botanical Garden, Horticulture Department, at 513-475-6106 or Dave Dyke at 513-505-1202.

More Annual Trial information (including results of the last two years) can be found at [www.cincinnatifoosozoo.org](http://www.cincinnatifoosozoo.org) and in *Ornamental Plants: Annual Reports and Research Reviews, 2003*, Special Circular 193, pp: 121–129 and at [www.ohioline.osu.edu](http://www.ohioline.osu.edu).