

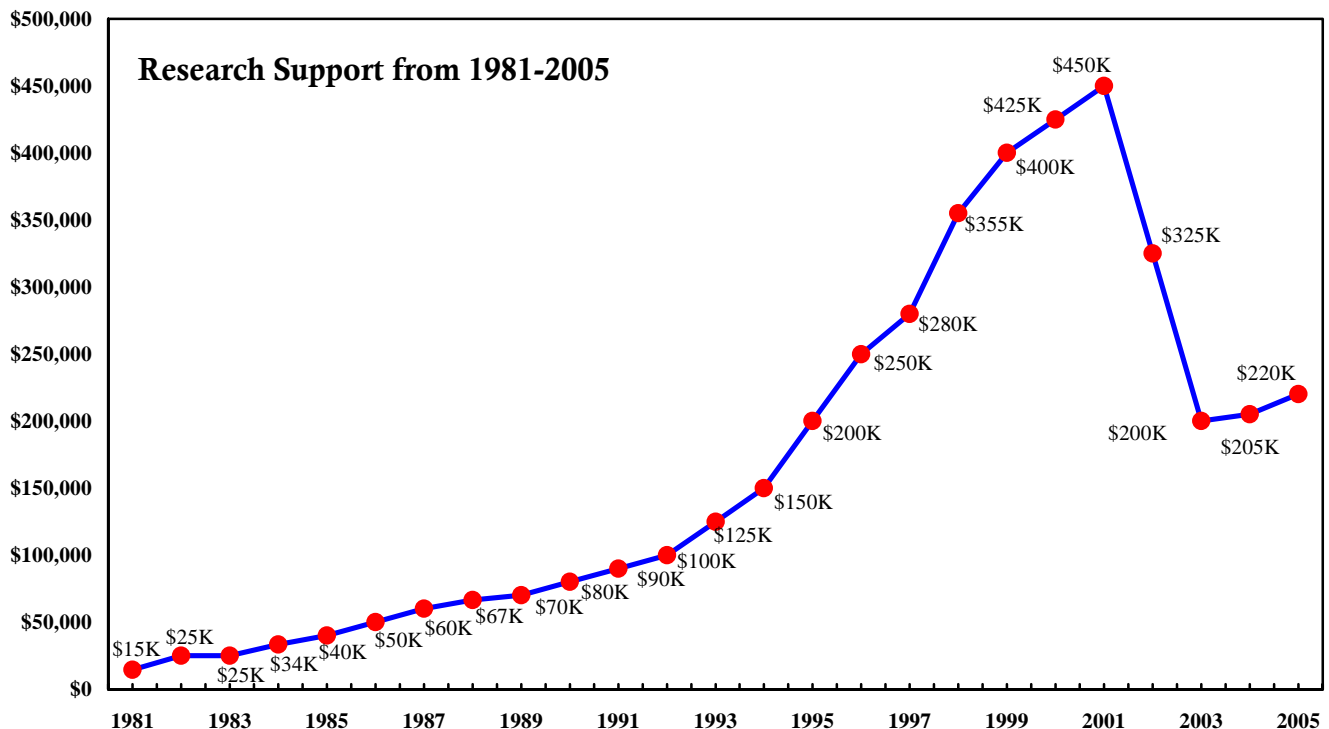
HORTICULTURAL RESEARCH INSTITUTE

Progress Through Research



Since 1963, the Horticultural Research Institute has directed more than \$4 million of industry funds to some 600-research projects covering the full range of production, environmental and business issues important to the trade.

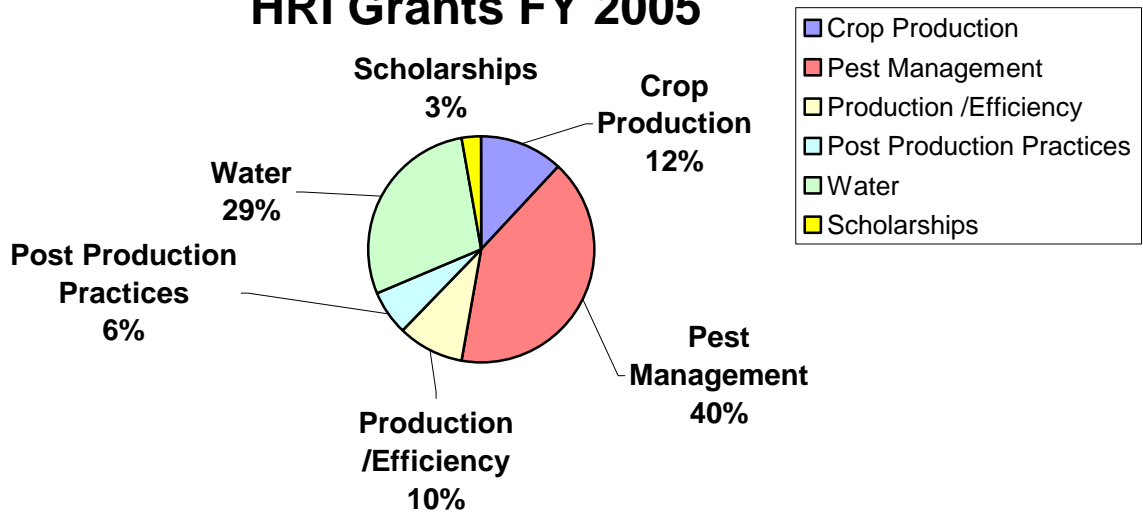
The HRI Endowment Fund is the primary source of project funding. Created in 1975 as HRI's philanthropic arm, the endowment fund now stands at \$8 million committed by more than 150 individuals, associations and corporations. The HRI Endowment Fund's principal remains invested and untouched; only the interest is tapped to fund research.



The HRI Executive Committee met in November in Reston, Virginia for their annual grants funding retreat. The committee considered 105 applications for funding and granted \$220,000 to 18 high-priority projects and four scholarships. Supported projects for 2005 include topics such as Phytophthora diagnostic methods, evaluation of bioplastic nursery containers, invasive species, and pest and resource management practices. The committee determined these projects best meet the needs of the industry and have quality scientific merit that will result in new knowledge and techniques to deal with major industry issues.

HRI is actively partnering with other associations to increase industry research. Most notably HRI has partnered with the USDA Agricultural Research Service to obtain and guide federal research dollars to critical industry research through the Floriculture and Nursery Research Initiative (FNRI). FNRI research funding now totals \$6 million. These partnerships represent an extraordinary advancement of HRI's mission to be a clearinghouse for nursery and landscape research.

HRI Grants FY 2005



The following information highlights the \$220,000 in research grants distributed by the Horticultural Research Institute Endowment Fund for FY 2005. The institution, principal investigator, project and amount of the grant are listed in topical order.

CROP PRODUCTION

Environmental Stress Reduction and Genetic and Induced Resistance

Landscape Plant Development Center (Harold Pellett)

Development of New Landscape Plants for all Regions of North America.....\$15,000

U.S. National Arboretum, USDA-ARS (Sandra M. Reed)

Developing Improved Woody Ornamentals through Interspecific Hybridization\$8,000

Landscape Plant Development Center (Harold Pellett)

Developing the Landscape Potential of Native Plant Species.....\$3,000

PEST MANAGEMENT

Altered Cultural Practices

University of California (Mike D Coffey)

Development of a Reliable and Rapid Diagnostic Detection Method for Phytophthora in Nurseries.....\$12,000

Biological Control and Integrated Pest Management

North Carolina State University (Colleen Y. Warfield)

Development of a PCR-based Detection Assay for Foliar Nematodes in Ornamental Host Plant Tissues.....\$11,000

Ohio State University (Parwinder S. Grewal and Daniel Herms)

Cost-effective Long-term Control of White Grubs in Nurseries Through the Establishment of Entomopathogenic Nematode Populations.....\$19,000

Weed Control and Integrated Pest Management

University of Connecticut (Mark H. Brand)

DNA Fingerprinting of *Berberis thunbergii* and *Euonymus alatus* to Determine the Origin of Invasive Populations.....\$20,000

University of Minnesota and Oregon State University (Stan Hokanson and James Altland)

Determining Relative Invasiveness of *Buddleja davidii* Cultivars and Developing Management Strategies to Prevent their Spread\$14,000

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North Carolina State University (Joseph C. Neal and David Monks)
Improving Access To Herbicide Safety and Efficacy Data.....\$2,000

Oregon State University and Auburn University (James Altland and Charles Gilliam)
Liverwort (*Marchantia polymorpha*) Control in Propagation and Container Systems\$12,000

Kansas State University (Jason J. Griffin)
Selecting a Drought Tolerant Sugar Maple Rootstock.....\$4,000

North Carolina State University (Ted Bilderback and Stuart Warren)
Reducing Water and Nutrient Inputs to Clay Amended Substrates: How Low Can We Go?.....\$12,000

The Ohio State University (Daniel K. Struve)
Mineral Nutrition and Nutrient Use Efficiency of Container-Grown Trees.....\$11,000

PRODUCTION /EFFICIENCY

Labor

The Ohio State University (Hannah M. Mathers)
Multi-state Survey of Nursery Laborer Level Employees: OH, MI, DE, TN, FL, IN, AZ
.....\$21,000

Water Additives and Water Management

Texas A&M University (Michael A. Arnold)
Ozone (O₃) Efficacy in the Treatment of Recycled Nursery Irrigation Water.....\$11,000

POST PRODUCTION PRACTICES

Physiological Acclimation and Post-production Stress Reduction

Iowa State University and University of Florida (William R. Graves, Jay-lin Jane, Heidi Kratsch, Perminus Mungara, and Jyotsna Sharma)
Evaluation of Bioplastic Nursery Containers in Three Climates\$14,000

SCHOLARSHIPS

Carville M. Akehurst Memorial Scholarship
.....\$1,000
Spring Meadow Nursery Scholarship....\$1,500
Timothy Bigelow and Palmer W. Bigelow, Jr. Scholarship.....\$2,500
The Usrey Family Scholarship.....\$1,000

WATER

Water Management and Water Use for Ornamental Plants

Colorado State University (Yaling Qian, Steve Newman, and James Klett)
Impacts of Recycled Wastewater Irrigation on Landscape Plants.....\$15,000

University of Florida (Dorota Z. Haman)
Real-time Irrigation Scheduling for Ornamental Plant Production Using Echo Moisture Sensors.....\$10,000

