



# Horticulture program grows with vigor

Dr. Lekha Sreedhar instructs *Horticultural Science* students inside the greenhouse.

**As the lead author** on scholarly articles published in journals like *Plant Science*, *Annals of Botany* and *GENE*, Dr. Lekha Sreedhar, associate professor, horticultural sciences, has proven herself an excellent academic.

But 16 years of study and research in plant sciences is only part of the reason Sreedhar has helped to make JCCC's horticulture program a success in terms of quality and growing number of classes. The real reason is Sreedhar's passion for the subject and her students. Her enthusiasm is contagious.

In this day's *Introduction to Horticultural Science* lab, students work inside the Horticultural Science Center's greenhouse surrounded by a sea of plants and flowers, planting six different leaf types in two different media in order to compare propagation methods. Students work knowingly as they determine the composition of the planting media and look for leaves from healthy stock plants to maximize growth. They are enrolled in the horticulture program with a variety of aspirations. Two want to become golf course managers; one is interested in environmental science, possibly plant engineering; another has aspirations to own a commercial greenhouse growing plants like organic hydroponic tomatoes; and there are more.

Carolyn Palmer, Newton, worked in a greenhouse for four-and-a-half years but now wants the science background. Colby Fuller, Emporia, already has a bachelor's degree in agronomy but is working toward JCCC's horticulture associate degree so he can obtain a job in landscaping.

"I really like this course," Fuller said. "Dr. Sreedhar is an excellent teacher. If anyone has a question off-topic, she can answer it."

Rebecca Walker-Garoutte, Lenexa, worked in the floral design business 28 years before enrolling at JCCC, where she is due to receive an associate's degree in May 2010. She is the greenhouse coordinator and likes the idea that she is supporting education by caring for a large variety of plants and trees inside and outside the greenhouse dedicated to student use.

"I feel this is a good program with continued efforts to use the best materials," Walker-Garoutte said. "Dr. Sreedhar

makes sure students receive a good science experience – with passion."

JCCC first offered a horticulture certificate program in 2001. In 2006, a landscape technician certificate was added, and a horticultural associate's degree became effective fall 2007. Horticultural, floral design and landscape technician entrepreneurship certificates are also offered. Sreedhar was brought on board as the only full-time horticulture faculty in 2006. Four to eight adjunct faculty in various areas of expertise also teach horticulture classes, including Dr. Alan Stevens, director, K-State Research and Extension Center, Olathe, and JCCC adjunct associate professor, landscape design.

"The skills students learn at JCCC are beneficial to the industry. Students receive an underlying depth of knowledge that they wouldn't receive with on-the-job experience," Stevens said.

Stevens says that JCCC's *Introduction to Horticultural Science* and *Plant Propagation* classes use the exact same textbooks and lab manuals as K-State's.

Asked whether he thought a horticulture program was necessary in the suburbs, Stevens said, "Yes, green space is a precious commodity in the city and suburbs, and we need quality educated people to maintain it. The JCCC program serves a strong and definite need."

The Horticultural Science Center, which opened for classes in fall 2001, houses one classroom, one lab with a laminar-flow hood and the greenhouse. Space, especially with a high night enrollment, is at a premium.

Dr. Csilla Duneczky, dean of sciences, points to new possibilities for program growth – plant biotechnology, plant sustainability, water conservation in irrigation and CAD design applied to *Landscape Design* classes.

According to Duneczky, interest is substantial in two horticulture electives, *Arboriculture* and *Pest Control Management*, for which students can sit for licensure examinations in those fields after course completion.

"We work with major nurseries, lawn care and landscape companies, florists, county extension agencies and private

gardens in order to serve the industry our faculty are experts in their fields. industry is that our students are well prepared.

Sreedhar networks in the community department at K-State and officials fro of Agriculture and Kansas and Missou Agriculture in order to provide her stu speakers and plum internships at loca Johnson County Park and Recreation D field trips to places like the Loose Park member of the Kansas City Rose Socie Overland Park Arboretum and Botanic Research and Extension Center, Olath relationships with nurseries, garden ce companies, propagation facilities, gard and biotech companies so students ar of the newest tools, techniques and m to tissue culture media.

“I want this to be a solid program,” Sreedhar said. anything to help my students succeed.

The PhD also credits her students for the progr She says her nighttime classes are filled with people who work eight to 12 hours in a nursery bef

“My students do extremely well. They k and complete well-written scientific repor

That’s a high endorsement coming from Sreedhar who earned a bachelor’s degree in agriculture science and a master’s degree in horticulture sciences from K Agricultural University, India; and a master’ agriculture and a PhD in plant physiology from the University of Guelph, Ontario, Canada, postdoctoral research in plant biotechnology at Rutgers’ Biotechnology Center for Agriculture and the Environment. She held the prestigious Commonwealth Scholarship f graduate studies in horticultural sciences f

Champion of the variety of fields open students – floriculture, pomology (study (study of vegetables), viticulture, nurser greenhouse management, landscape de interiorscaping, micropropagation and h Sreedhar is positive that anyone who lik find a specialty to their liking. If one do her hands dirty, Sreedhar will espouse m tissue culture – a new trend for nurserie propagate/clone superior plants *in vitro* stock plant and rescue heavily infected include landscape design, hydroponics, horticultural sales.

Her enthusiasm extends from her prof personal life. At age four, she was captiv rose garden in India. Her love of flow She keeps lists of plants/flowers and their respec photographs that she has encountered. and has about 300 in her home.

“Plants are fascinating,” Sreedhar said. know and so much we don’t know.” ■



Colby Fuller and Natalie Martin set up an experiment during a leaf propagation lab.



Rebecca Walker-Garoutte, greenhouse coordinator, plans to earn her horticulture associate's degree in May.



Sean Connolly has plans to become a golf course manager.