

Published: September 7, 2011 00:00 IST | Updated: September 7, 2011 03:57 IST September 7, 2011

### Harvest your love for gardening



Love to spend your time among plants and trees? Fascinated by their production and development? Have a passion for beautifying your surroundings? Are you intent on conserving the ecosystem? Then here's the opportunity to take your ardent gardening interests to the next level by becoming a qualified horticulturist!

Horticulture is in itself an art, industry and science dealing with the production of fruits, vegetables, flowers, nuts, spices and ornamentals. This is emerging as both a promising and exciting career option what with the exploding demand for fresh, organically produced and hygienically packed fruits and vegetables and increasing requirement for decorative flowers. The demand for such products is growing at an annual rate of 20% in India.

#### **Employment Prospects**

You can make a career in growing, maintaining and harvesting horticulture/floriculture farms, parks, gardens or even golf courses. Or, enter the field of processing, preserving and marketing fruits, flowers and vegetables. Horticulturists can even move on to managing and supervising agricultural practices to maximise yield.

Ongoing scientific research and technological advancements have opened doors to stimulating prospects like breeding new and improved strains of fruits, vegetables and flowers, developing exotic species, improving crop yield, quality and nutritional value, increasing resistance to insects or diseases, etc. You can engage in plant physiology, propagation, biochemistry, genetic engineering and the like.

On the other hand, there are teaching opportunities in agricultural universities and colleges as well as technical advisory opportunities like motivating and advising farmers and fruit growers or working as a liaison with marketing agencies.

Else, you can opt for self-employment by setting up your own farm, commercial nursery or botanical garden. Seed production, dry flowers ventures, cold storage, 'Go Green' projects and export/import of horticultural products are other viable options.

#### Jobs and Workplaces

It goes without saying that horticultural jobs and positions are as wide-ranging as the employment opportunities.

Vegetable farms, fruit orchards, vineyards, horticultural institutes, retail garden centres, hothouses and nurseries all require skilled horticulturists. Public parks, golf courses, hotels, resorts, private bungalows and other institutions with extensive grounds for landscaping purposes are other options. Construction companies, landscape architectural firms and maintenance crews employ consultants and researchers for advice about plants and plant care.

In government organisations, the department of horticulture regularly appoints District Horticulture Officers, Assistants, Inspectors, Farm Supervisors and Directors. Training Organisers, Associates and Assistants also find employment in Krishi Vigyan Kendra (KVK). Agricultural universities and colleges offer opportunities as Lecturer, Reader, Assistant Professor and Associate Professor. Then there are research openings for scientists where one can specialise in specific areas like tree disease or exotic flowers. You can even write the civil services examination.

Apart from this, private organisations dealing with horticultural activities offer varied managerial and advisory positions like - Warehouse, Store and Quality Managers in fruit and vegetable

farms, Unit Supervisors and Plant Managers in floricultural processing units, Estate and Plantation Managers in plantation firms and Estates and Marketing Executives in agriculture production process companies as also in pesticides and insecticides companies. Experienced horticulturists can even become Quality Inspectors for commercial canning in quick-freezing stations or packaging for the domestic and export market.

Average earnings vary depending on the level of education, type of employment and skills. You can expect to start at a remuneration of Rs. 8,000 to Rs. 10,000 per month.

#### Eligibility

Horticulturists do enter the field just with a sound understanding of plants and their significance. But obtaining formal in-depth training at the college or vocational level is always preferable.

A bachelor degree in horticulture is a four-year programme and requires 10+2 with sciences including Physics and Biology. For the 2-year Masters' course a B.Sc. degree in Agriculture or a related subject is needed.

These courses are offered by almost all state agricultural universities and some private institutes too with admission mostly through entrance exams. The Agriculture Scientist Recruitment Board, ICAR, New Delhi conducts examinations for aspiring scientists, the State Public Service Commission for District Horticulture and Agriculture Officers and the Union Public Service Commission for civil services.

You can further obtain a Ph. D. or even specialise in independent fields like arboriculture, olericulture (vegetables), pomology (fruits), floriculture (flowers), viticulture (grapes), post-harvest physiology, town beautification, etc.

#### **Personal Attributes**

It goes without saying that a love for plants and interest in studying soils, weather conditions, diseases, treatments, etc is indispensable. An artistic flair and creative outlook will stand you in good stead.

Working outdoors with plants is a tedious and back-breaking job requiring long hours, sometimes in extreme weather conditions. You also have to be physically fit, organised and

responsible. Patience and perseverance is essential as it takes hard work and time for your efforts to literally bear fruit.

#### Scope

Depending on the level of training, qualifications, skills and experience, you can start working as a horticultural assistant, technician, therapist, consultant or scientist and move on to horticultural officer, inspector, supervisor or director. With additional training, you can choose to specialise as an arborist, landscape architect, designer or urban planner.

Experience and familiarity will even qualify you to write books and articles on the subject. Else, you can establish an agriculture clinic or even an institute for vocational education in horticulture. So, go ahead and turn your green thumb into an aesthetic career by caring for plants.

Payal Chanania

faqs@cnkonline.com

University of Agricultural Sciences, Bangalore

Website: www.uasbangalore.edu.in

College of Agriculture, Faculty of Agriculture, Rajendranagar, Hyderabad

Marathwada Agricultural University, College of Horticulture, Parbhani, Maharashtra

Website: http://mkv2.mah.nic.in/

College of Horticulture, Vellanikkara, Trichur, Kerala

Website: (www.kauhort.in)

Indian Agricultural Research institute, Delhi

Website: http://www.iari.res.in/index.php

Rev. Carey Institute of Horticulture, Kolkata

Dr. Yashwant Singh Parmar University, College of Horticulture and Forestry, Solan, Himachal Pradesh

Website: http://www.yspuniversity.ac.in/

Babasaheb Bhimrao Ambedkar Bihar University, Muzaffarpur

Website: www.brabu.net

Shri Venkateshwara University, Tirupati

Anand Agricultural University, Gujarat

Website: www.aau.in

Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh

Website: http://igau.edu.in/igkv/

GB Pant University of Agriculture and Technology, Pantnagar, Uttarakhand.

Faculty of Horticulture, Tamil Nadu Agriculture University Coimbatore (Tamil Nadu).

Horticulture College and Research Institute, Periyakulam (Tamil Nadu)

Kerala Agricultural University, Miscellany (Kerala)

College of Agriculture, Mysore (Karnataka)

College of Agriculture, Pune (Maharashtra)

Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli (Maharashtra)

Printable version | Sep 7, 2011 11:27:37 AM | http://www.thehindu.com/todays-paper/tp-features/tp-opportunities/article2430709.ece

Published: September 7, 2011 00:00 IST | Updated: September 7, 2011 03:57 IST September 7, 2011

### Blooming prospects in horticulture

Dr. K. Purushotham carries with him 25 years of vast experience in the field of research. After completing his M.Sc in Agriculture, he did his Ph.D in Horticulture and served as Horticulturist and Principal Scientist in ANGRAU. Currently, he is extending his valuable services as Director of Research to Dr. Y.S.R. Horticultural University (formerly known as Andhra Pradesh Horticultural University). Dr. Purushotham took out some time for us to throw light on career in the field of horticulture. Excerpts from an interview:

# Dr. Y.S.R. Horticultural University is the second horticulture university in India. What was the impetus behind its initiation?

In Andhra Pradesh, several horticultural crops are grown on a commercial scale and provide livelihood to millions of farmers in the state. With high geographical diversity, nine agro-climate zones, varied soil types and good irrigation resources the state is better placed for production of various horticultural crops.

However, due to rapid change in the climate, the state witnesses abnormal behaviour in the precipitation, wide fluctuations in temperatures, and depletion of natural resources like water and nutritional status of soil. Hence, there is a need to reorient our research programmes to meet these challenges and upgrade our technologies for storage, processing, handling and export of horticultural produce to meet the international standards. Hence the Dr. Y.S.R. Horticultural University was initiated.

# How do you see the awareness of students about horticulture as a career option? Tell us about the seat distribution among students from various backgrounds.

Though students know about career opportunities in research, public/private sectors they are not fully aware of the potential of horticultural industry. Both students and their parents think that the opportunities in the field of horticulture are relatively less, which is not true. Coming to seat distribution, 40 per cent of sets in the university are allotted to the students from farm families

(farmers quota) and the remaining to others irrespective of their background adopting Presidential rules for different regions in the state of A.P.

#### What are the kinds of employment opportunities available to horticulture students?

Some coveted roles are Scientists in government research organisations, Horticultural Officers in Department of Horticulture, Rural Development Officers, Agricultural Finance Officers, Probationary Officers in Banks, Scientists in R and D of private seed companies and Marketing Executives of private seed / pesticide companies. Employment opportunities can be found in pharmaceutical companies based on herbal medicines, processing industries and nurseries.

#### How are the different entrepreneurial opportunities in Horticulture field?

Entrepreneurial opportunities are bright in Processing industry seed industry, cut flower industry, landscaping, nursery production and export of fruits/ vegetables/ flowers. Captive cultivation of high value exotic variety of vegetables/ flowers is another promising area.

#### What are the challenges the horticulture field is currently dealing with?

Expertise in the fields of Post harvest technology, value addition, landscape gardening, Tissue culture and biotechnology are some challenges the field is currently facing.

### What is the kind of the position Indian Horticulture sector/ products holds in the international arena?

Though India is the leader in the production of horticultural produce, very little is exported. India is the leading producer and exporter of spices, particularly chillies and turmeric. Mango, citrus, banana and pomegranate are the important fruits being produced and exported. Among flowers, rose, gladiolus, heliconia and dry flowers are mainly exported. Pickles and mango pulp are the main processed products that are exported.

#### What are the areas of research the APHU is currently focusing on?

Increasing productivity

Sustaining productivity under biotic and abiotic stresses

Improving nutritive value and food safety

Environment protection

Increasing profitability to the farmers

Export promotion

Minimisation of post harvest losses

Processing and value addition

# What are the activities the university takes up to increase the awareness about horticulture as a promising career option?

University regularly updates its official website with the information on career opportunities. On campus interviews and selections are being arranged and monitored. We also organises training programmes to hone horticultural skills and provide hands on experience.

#### Which are the top organisations that hired students from your university?

Public sector banks like Andhra Bank, Indian Bank, Syndicate Bank, NABARD. Private companies like Vibha Seeds, Aries Agro Ltd, Andhra Sugars, Ruchi Soya Industries, etc. Some roles on offer were managers, marketing executives, officers in production and R and D. To grab a good job offer, expertise in areas like Tissue culture, Bio-technology, Food Processing, Seed Production, Poly House cultivation, Canopy management in fruit trees, Nursery production are very important. Apart from technical skills, managerial abilities, leadership qualities, enthusiasm, creativity and commitment to work are what employers look out for in candidates.

#### What is your message to fresh graduates of Horticulture?

Learn by actually doing things in the field, and observing the crop behaviour and their response to changes in the climate. Then, sincerity, commitment, and hard work are must. Do not wait for the opportunities to come to you, go in search of them. Update your knowledge on the subject and also on the career opportunities, constantly.

Nitya Sai Soumya ,faqs@cnkonline.com

Printable version | Sep 7, 2011 11:31:50 AM | http://www.thehindu.com/todays-paper/tp-features/tp-opportunities/article2430706.ece

Published: September 7, 2011 00:00 IST | Updated: September 7, 2011 03:57 IST September 7, 2011

### Dr. Y.S.R. Horticultural University

Dr. Y.S.R. Horticultural University is a specialised institute established by the Government of Andhra Pradesh in June 2007 for horticulture-related education and research. It holds pride of place as the second horticultural university in India and the first of its kind in the southern region. The State being the food bowl of the south and second-largest producer of fruits and spices provides the perfect setting for this commended academia.

The university is located at Venkataramannagudem, near Tadepalligudem in West Godavari District and has four colleges (Rajendranagar–Hyderabad, Mojerla–Mahaboobnagar, Anantharajupet– Kadapa and Venkataramannagudem-West Godavari) and five polytechnics (Dasnapur–Adilabad, Kalikiri– Chittoor, Madakasira-Ananthapur, Ramachandrapuram-East Godavari and Ramagirikhilla– Karimnagar) under its jurisdiction.

Some of the departments functioning in these colleges are fruit science, vegetable science, forticulture and landscaping, post-harvest technology, bio plant chemistry and microbiology, genetics and plant breeding, extension, economics and social sciences, engineering and environmental sciences.

The main thrust of the university is to develop manpower resources by imparting quality training and education in such a way that the students are properly positioned to meet the changing needs of the horticulture industry as well as allied sectors like storage, processing, value addition etc.

Apart from teaching, it is also committed to conducting need-based and location-specific research, organising extension activities, refining and disseminating the new technologies, minimising post-harvest losses and export promotion. Accordingly, it organises ongoing

research programmes at 27 research stations spread over nine agro-climatic zones in the state apart from hosting three Krishi Vigyan Kendras (KVK) for grassroot level vocational training.

#### **Details of Courses**

Dr. Y.S.R. Horticultural University offers courses at undergraduate level- B.Sc (Hons.) in Horticulture, post graduate level- M.Sc (Horticulture) and Doctoral level- PhD (Horticulture) apart from Diploma in Horticulture at four polytechnics.

The various course contents have been carefully formulated in accordance with the present day demand like nutritional security, food safety, environment safety and commercialisation and globalisation of horticulture. They are in keeping with the recommendations of the IV Deans Committee of ICAR with slight modifications.

The degree programme is offered at all five colleges as a four academic year course with eight semesters. It consists of varied segments like seed production, landscape gardening, medicinal and aromatic crops, entomology, plant diseases, organic farming, soil science, environmental science and even economics, statistics and social science. Both the final year semesters incorporate experiential and hands-on training in various horticultural skills and commercial technologies.

The undergraduate programme has 220 seats plus 20 payment seats apart from 34 seats reserved under the ICAR quota for students from other states. Admissions start in the beginning of the first semester and the selection criteria is based on EAMCET rankings. The university also conducts HORTICET exams to shortlist diploma-holder candidates from horticulture polytechnics for admission into the B.Sc (Hons) course. There are appropriate reservations for SCs, STs, BCs, physically handicapped, women candidates and those from agriculturist families.

Candidates who have passed the two-year Intermediate Examination conducted by the Board of Intermediate Education, Andhra Pradesh (or other recognised equivalent) with any 2 subjects from Physical Sciences, Biological/Natural Sciences, Agricultural Sciences and Vocational courses in Agriculture are eligible to seek admission. They should also have completed 17 years of age as on 31st December of the year of admission with an upper age limit of 22 years.

The post-graduate programme is of two years with specialisation in Fruit Science, Vegetable Science, Spices and Plantation crops or Forticulture and Landscaping. It is offered only at the College of Horticulture, Rajendranagar (Hyderabad) and College of Horticulture, Venkataramannagudem (West Godavari District).

The PhD programme is of three years and is again offered only in Hyderabad and West Godavari districts.

For the P.G. Courses, part of the curriculum comprises of research and submission of a thesis under the guidance of an advisory committee. Students work on location-specific and practicaloriented problems like post-harvest technology, biotechnology etc.

The Dr. Y.S.R. Horticultural University is widely-acclaimed for its quality of education. There are campus recruitments and students also have sound potential for acquiring good jobs as Scientists, Consultants, Technical Officers etc. in the Dr. Y.S.R. Horticultural University and other government organisations apart from private industries.

#### Contact details:

Dr.C.V.S.K.Sarma, I.A.S., Vice-Chancellor, Dr. Y.S.R. Horticultural University, Post Box no. 7,

Venkataramannagudem-534 101, West Godavari District, Andhra Pradesh

Phone: +91 - 8818 - 284312, Email: vcaphu@gmail.com, vc@aphu.edu.in

Website: www.aphu.edu.in,Payal Chanania ,faqs@cnkonline.com

Printable version | Sep 7, 2011 11:32:50 AM | http://www.thehindu.com/todays-paper/tp-features/tp-opportunities/article2430705.ece

© The Hindu