

R&D Division Course On:

VEGETABLE PRODUCTION IN A PROTECTED ENVIRONMENT

November 16th - December 10th, 2014





Israel's Agency for International Development Cooperation Ministry of Foreign Affairs



CINADCO

Center for International Agricultural Development Cooperation Ministry of Agriculture and Rural Development



Agricultural Research Organization MASHAV – Israel's Agency for International Development
Cooperation, and CINADCO - Center for International Agricultural
Development Cooperation, in cooperation with the ARO – Agricultural
Research Organization, the Institute of Plant Science,
invite professionals to participate in the course on:

VEGETABLE PRODUCTION IN PROTECTED ENVIRONMENT

which will take place in CINADCO's Training Centre,

Volcani Agricultural Complex, Israel

16 November – 10 December, 2014

About the course

Background

Vegetable production under protected conditions is becoming an essential practice of modern agricultural production in light of a growing world market demand for off-season, year-round vegetable availability, and as a means to achieve better and higher quality yields otherwise unachievable under open field conditions, even in areas or seasons that would not normally enable vegetable production. The modern vegetable production industry requires the application of the most up to date, relevant technologies and know-how. The input of various aspects like plant physiology, plant protection (entomology, pathology and virology), meteorology, soil sciences should be considered.

Year round vegetable production in open fields and under natural conditions is susceptible to varying environmental conditions, such as extreme temperatures, high or low relative humidity, soil or water salinity or limitations, and various diseases and pests. All these affect plant vegetative development, flowering, fertilization and fruit set, and ultimately determine the yields and quality of the end product. A good healthy seedling is a prerequisite for successful crop. Seed quality has a marked impact on seedling and plant performance. Growing vegetables under protected conditions enables producers to control many of these elements, using modern technology, to create a more favorable environment for vegetable production.

Aims

To enrich the participants with the latest advances in vegetable production under protected environment including the physiological and biological principles and factors involved in plant development and reproduction, understanding the effect of environmental conditions (including abiotic stresses) on vegetable cultivation and how to use this knowledge for obtaining high yields with high quality vegetables.

Main Subjects

The course will cover various aspects of crop production, from seed to fruit, and from biological and technological aspects.

- 1. Seed production
- 2. Principles of vegetable seedling production (nurseries)
- 3. Vegetable grafting
- 4. Vegetable breeding
- 5. Cultivation procedures
- 6. Irrigation and fertilization
- 7. Fruit development
- 8. Use of plant growth regulators (plant hormones)
- 9. Plant protection- Pests- Biological and classical control
- 10. Plant protection- Diseases- Biological and classical control
- 11. Robotics and technologies
- 12. Structures and covers (Nets and plastics)
- 13. Greenhouse production and the environment
- 14. Postharvest, marketing and export.
- 15. Knowledge transfer chain- research extension- experimental stations-farmers

The course will consist of three major components: 1. Frontal lectures from top experts in the field; 2. Professional tours and visits in advanced greenhouses and other relevant sites. 3. Each participant will be asked to prepare, before coming, a 10 min. Power Point presentation reviewing vegetable production situation in his/her country, the problems that they are facing and ways to improve vegetable production. This will be the basis for the final work presentation at the end of the course showing how did the course helped to achieve the expected improvements.

Qualifications

This course is designed for research, extension and academic professionals from government agencies, as well as from national or international organizations, universities, research institutes, civil society and the private sector involved in vegetable production and that are interested in current advances in vegetable production technologies.

Course participants must have a relevant academic degree and at least three (3) years of practical work experience in related fields. A very good command of the English language is essential.

Application forms

Application forms and other information may be obtained at the nearest Israeli mission and at Israel's Ministry of Foreign Affairs website: http://mashav.mfa.gov.il (in Contact Us → Information and Registration), or at Volcani website at www.agri.gov.il (Administration → International R&D Courses). Completed application forms, including the medical form should be sent to the Israeli mission in your area and also faxed or e-mailed to CINADCO Training Center in Israel:

Fax no: +972 3 9485771 / e-mail: <u>sigalp@moag.gov.il</u>.

Deadline for submitting application forms: October 6th, 2014

MASHAV will award scholarships covering tuition fees, full board accommodation (two participants share a room), basic medical insurance and transportation to and from the airport. Scholarships do not include international airfare and per diem.

General Information

Location and accommodation

The course will be held at the Volcani Agricultural Complex, situated 10 km east of Tel Aviv, Israel.

Transportation

Participants will be transported from and to Ben Gurion airport, **without charge**, by Tal Limousine Company, which is located on the mezzanine level at the Arrivals Hall. Participants are requested not to take any other transport company.

Clothing

The course will be held in the winter. Temperatures may vary between 12°C and 25°C with probabilities of rainfall. It is therefore recommended to bring warm clothing but also T-shirts and light clothes, suitable footwear for field trips and swimwear.

Insurance

Participants are medically insured by a health insurance policy. This policy does not cover the treatment of chronic or serious diseases, dental care, eyeglasses, pregnancy and specific medication taken by the participant on a regular basis. Participants are required to bring with them their usual medication. No insurance of personal belongings like money, video cameras, laptops or jewelry will be provided.

About MASHAV

Israel's Agency for International Development Cooperation (MASHAV) was founded in 1958 as part of Israel's Ministry of Foreign Affairs. MASHAV is responsible for initiating and implementing Israel's development cooperation programs worldwide. MASHAV aims at transferring to developing countries the expertise and technologies that have assisted Israel on its own path to development. Today, Israel cooperates with over 140 countries, providing training in Israel and abroad, and operates on-site long-term demonstration projects. MASHAV is active in fields ranging from agriculture to health and from community development to entrepreneurship. http://mashav.mfa.gov.il

About CINADCO

The Center for International Agricultural Development Cooperation (CINADCO) is a part of the Israel Ministry of Agriculture and Rural Development. Since 1958, CINADCO has been in charge of the International Agricultural programs conducted by MASHAV in Israel and abroad. CINADCO's activities consist of: International and country "tailor-made" courses in Israel, on-the-spot courses, long- and short-term projects and advisory missions. Israeli experts are also sent to different locations around the world to conduct projects and to share their expertise in various aspects of agricultural production, extension and project planning. http://www.cinadco.moag.gov.il/cinadco

About ARO

The Agricultural Research Organization (ARO) is the research arm of the Ministry of Agriculture and Rural Development and is responsible for most of the agricultural research conducted in Israel. The scientists of the ARO collaborate with the regional R&D Stations and with the Agricultural Extension Service of the Ministry of Agriculture. Research at the ARO aims to improve existing agricultural production systems and introduce new products, processes and equipment on which Israel's future agricultural efforts will be based. ARO website: http://www.agri.gov.il

For further information please contact:

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