SUSTAINABLE CROP PROTECTION

SUSTAINABLE PRODUCTION BY COMBINING KNOWLEDGE

By: Jan Janse and Rob Meijer, Wageningen UR Greenhouse Horticulture

DLV Plant, Grodan, Koppert and Nunhems have joined forces in the Sustainable Growing Plaza platform. The goal is to help make horticulture more sustainable in the Netherlands and internationally. By jointly developing knowledge in the field of plants, greenhouse climates and root environment, the companies are creating new strategies for increasing production with a smaller input of energy, plant protection products and water.

Horticulture – in the Netherlands and worldwide – faces the challenge of supplying the ever increasing global population with food while minimising the impact of its activities on the environment. High production of quality vegetables with minimal means can be achieved by taking a joint approach to plants, greenhouse climates and root environments. The four companies have joined forces in the Sustainable Growing Plaza to gain synergies from their work on these factors.

Root environment

Rock wool producer Grodan underlines the role of the substrate in the concept of 'Precision Growing'. Better substrate characteristics ensure the optimal distribution of water drops and a better management of the root environment, growth and water and nutrient use. Biological crop protection supplier Koppert developed the 'Natugro concept', which stimulates organic life in the root environment and increases disease resistance. It also reduces the need for crop protection products.

Plant and climate

Seed company Nunhems develops special cucumber varieties for high-wire cultivation. Their specific genetic characteristics achieve a higher production with less means when the proper cultivation measures are followed. DLV Plant has good experiences with these varieties in consultancy and research projects in Russia, Kenya and the Netherlands. Intelligent crop management can help realise high production with less use of energy, water, nutrients and crop protection products in which knowledge continues to be the deciding factor.

Intelligent combinations are key

The partners in the Sustainable Growing Plaza state that the joint knowledge development in the field of plant, root environment and climate is of the essence in realising more sustainable cultivation methods. The cooperation between the four partners forms an excellent foundation for increasing the sustainability of cultivation worldwide.

Partners in this HortiSeminar: Koppert Biological Systems, Grodan, Nunhems Zaden, DLV Plant