Institute of Horticulture in the context of fruit industry in Latvia

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The Institute of Horticulture was established on 1 January 2016, after reorganisation of the Latvian State Institute of Fruit-Growing. Institute is the leading institution in horticultural research, carrying out four priority directions — 1 — Diversification and breeding of cultivars suitable for the Baltic Sea region; 2 — Environment-friendly production systems; 3 — Storage and processing technologies for horticultural crops; 4 — Fundamental biological research for horticultural science. Research is aimed at development of horticulture taking into account international tendencies in science.

Fruit industry in Latvia has high potential — market and consumer demand increase for locally grown high quality fruits, supply still does not meet demand; EU financed project "School fruit" needs large amounts of fresh fruits; Increasing number of processing SMEs*, their diverse, original products have good market potential. According to the data of Latvian Orchard-man Association, there are about 800 farms specialising in fruit producing in Latvia. Small farms with orchard area up to 3 ha dominate suitable for production of one or few fruit crops of the remarkable diversity, and only 6 % are large farms having orchards over 15 ha, but specialised farms are dominant. Since 2006 the integrated growing system in most farms has been introduced. Insufficient cooperation is an obstacle to faster development; however some cooperatives already are established. The diversity of crops and their cultivation methods are highly diverse — therefore fruit producing needs scientific expertise and long-term research. Diversity of terrain, soils and climate, severe winters all demand careful choice of suitable locations and cultivars. This does not allow direct application of experience from other European countries. Therefore, qualified consulting and strategic guidance of the industry, as well as economic and marketing research are especially important. Continuous lack of support for long-term research hinders development of horticulture and is one of the main problems in horticultural science.

As result of previous research carried out by the Institute — 1 — New local fruit crop cultivars have been bred and local and introduced cultivars have been recommended for commercial orchards; and testing of these cultivars, including studies on their growing technologies, are initiated in different regions of Latvia; 2 — Monitoring of harmful and favourable organisms have been done in orchards, including studies of their development and prognosis, improvement of some control methods; 3 — System for scab and codling moth prognosis developed and managed; 4 — Research results transferred to growers — practical recommendations have been developed and published, including 40–50 popular science publications annually, a number of books and DVD; training, consulting, seminars for growers and processing enterprises; 5 — Over 10 processing products available in shops, based on technologies developed at the Institute.

*Small and medium-sized enterprises

Keywords: breeding, farm size, fruit market, growing area, processing, production systems