

## On the main factors that determines early development of strawberry yield — warm temperatures in last autumn

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It is known that strawberry inflorescence initiation occurs in previous autumn. In order to success this process, appropriate day length and suitable temperature is important. During the last 40 years strawberry inflorescence initiation under field conditions have not been studied in Latvia. However on in the field conditions this is very difficult traceable and adjustable process. Since 2014 at the Institute of Horticulture (Latvia University of Agriculture) such studies have been started. Trial was established in August of 2014 and two strawberry cultivars ('Rumba' and 'Sonata') are used. The trials have been designed in the FVG type high tunnel and in the open field. Plants were planted in beds covered with black plastic mulch. During the study air temperature have been evaluated (2014–2016) in the autumn, winter and spring. The stage of development of the inflorescence was definite before wintering. Inflorescence and fruit / flowers were counted during the flowering time. The beginning of harvest and yield amount was fixed. The harvest earliness depends on air temperatures in the spring, and results of the study suggest that the more important is condition of temperatures during the inflorescence initiation and development in previous autumn. It's important that stems will be inducted more, but also the stage of inflorescence's development before wintering. This hasten type is already applied in Europe, but there are aware of the risk if in the wintering period is black frost, the greater the chance that inflorescence will be damaged by frost. However during the study time the black frost was not observed. Temperatures were high in the both autumns (2014 and 2015) and yield was earlier in both growing conditions — in high tunnel and on open field.

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