3rd international scientific conference "Sustainable fruit growing: from plant to product" Riga–Dobele (Latvia), 17–18 August 2016

The incidence of storage diseases on apples and pears in Latvia

Regīna Rancāne, Lelde Grantiņa-Ieviņa, Guna Ērgle

Latvian Plant Protection Research Centre, Struktoru iela 14a, LV-1039, Rīga, Latvia, email: regina.rancane@laapc.lv

Research was carried out in 2015 to detect incidence level of storage diseases and to identify the most important causal agents of the diseases under certain conditions. Observations were done in four storages on six apple cultivars in spring and in eight storages on eight apple and seven pear cultivars in autumn. In seven storages stored fruits were grown in integrated orchards, in one fruits were taken from the biological orchard.

During the spring survey of storages the incidence level of the storage diseases reached 40% on certain cultivars but on average — 13% in all storages. *Neofabraea* spp., *Colletotrichum* spp., *Botrytis cinerea* and *Penicillium* spp. were the most important causal agents of the storage decay on apples during spring. The incidence level of the diseases during the autumn survey was low on average 0.90% on apples and up to 1% on pears, on the early harvested cultivars 'Suvenīrs' and 'Mramornaya' the incidence level reached 5-7%. *Botrytis cinerea* and *Monilinia fructigena* were the most important causal agents of the storage decay on apples and pears during autumn. Observations in storages will be continued to identify the causal agents of the diseases and to determine the incidence level of diseases, which depends on different factors, on some particular cultivars.

Keywords: causal agents, *Colletotrichum* spp., *Botrytis cinerea*, *Monilinia fructigena*, *Neofabraea* spp., storage decay