

Preliminary results with clones of the apple cultivar 'Baltais Dzidrais' (WHITE TRANSPARENT) in Latvia

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'Baltais Dzidrais' (WHITE TRANSPARENT) is an old cultivar of presumably Latvian origin. A trial of nine clones collected in Latvia was established in 2010, using two-year old trees on rootstock 'B9' (one clone also on 'B396'), in nine replications, one tree of clone per replication. Trees from two different nursery fields were used, which resulted in different plant quality. In 2010 analysis using seven SSR gene markers was performed, which showed six clearly distinguishable groups of clones — 1: Soldovera; 2: Daugmales; 3: Staru, Garaušu, Rogu; 4: Skuju; 5: Šoha, Skujiešu; 6: Skrīveru. Yet in the first years plant quality had more significant effect on tree productivity than their genetic identity. It is expected that, as the trees become older, the influence of nursery plant quality may decrease. Evaluated parameters were: tree general condition, flowering and yielding intensity (points), average yield (kg per tree) and yield per TCSA (g cm⁻²), average fruit mass (g), amount of non-standard fruits (%), uniformity of fruit shape (points), distribution of fruits into size groups (mm). Preliminary results showed that Rogu clone had the best fruit quality, while Skrīveru clone — the highest productivity. Some visual differences were observed in fruit appearance, but not every year. Scab injury evaluation in an unsprayed collection for three years showed that Skuju clone may have better scab tolerance.

Keywords: fruit quality, gene markers, *Malus × domestica*, productivity, scab