

### **Short Note: High Throughput Microsatellite Genotyping in Oak Species**

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#### **Abstract**

Microsatellites are widely used markers for multiple purposes in oaks. We describe a complete procedure for cheap DNA extraction and fast microsatellites genotyping by multiplex PCR. 10 loci were selected to form two multiplex kits including three loci that show a high differentiation between *Quercus robur* and *Q. petraea*. The loci were tested in three oak species and show a high mean genetic diversity of 0.84. The cumulative exclusion probability for parentage analysis was 0.999977 for single parent and 1.0 for paternity. Finally, the relatively high differentiation coefficient ( $G_{st} = 0.04$ ) will facilitate species assignment based on genotypes in oaks.

**Key words:** microsatellites; multiplex PCR; *Quercus*; genetic assignment; parentage analysis.