

## EVALUATION OF MICROSATELLITE MARKERS IN FRASER FIR (*ABIES FRASERI*)

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### ABSTRACT

We tested 20 microsatellite primer pairs from Fraser fir (*Abies fraseri*) for PCR amplification and allelic polymorphism. These primers originated from cloned inserts enriched for DNA sequences containing tandem repeats of (AC)<sub>n</sub>, (AG)<sub>n</sub>, and (AAT)<sub>n</sub>. In total, 30 clones were selected for evaluation. PCR primers for 18 of these clones consistently produced single/simple PCR profiles. From these, nine markers were found to be polymorphic among 13 Fraser fir samples and are apparently robust for use in population genetic or genome mapping studies. These markers are being applied in a population genetic study of Fraser fir to assist in efforts to effectively and efficiently conserve the species' genetic diversity.

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### KEYWORDS

Microsatellite DNA, population genetics, fir.