

Preliminary results of Aleppo pine (*Pinus halepensis* Mill.) diversity in Morocco as revealed by chloroplast microsatellites

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Abstract

Moroccan populations of Aleppo pine (*Pinus halepensis* Mill.) are the most southwest marginal populations in the Mediterranean Basin. Through out its range, it individualize a discontinuous distribution ranged from zero to 2600 m in altitude and grows in heterogeneous ecological conditions. In term of afforestation, artificial forest occupied about 6% in which Aleppo pine is the most used. However, information about its genetic diversity is not available.

Six chloroplast, paternally inherited simple-sequence Repeat (cpSSR) markers were used to describe its variability in six population belonging to three biogeographic regions in Morocco, the High Atlas, the Middle Atlas and the Eastern Rif, respectively.

The level of the genetic differentiation among populations as revealed by the AMOVA analysis is 5.34 % of the total diversity. The low value of among populations differentiation seem to be strongly related to the hypothesis of recent migration of Aleppo pine.

The distribution of haplotypic diversity in relation to the recolonization processes will be discussed.

Key word : Aleppo pine, chloroplast microsatellites, diversity, Morocco