Isolation of microsatellite loci from the kelp, Saccorhiza polyschides (Heterokontophyta, incertae sedis)

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Abstract

Kelps are ecologically important seaweeds that dominate the subtidal zones of rocky coasts. In Northern Europe, *Saccorhiza polyschides* is a pioneer species suspected of outcompeting the harvested kelp, *Laminaria digitata*. To examine how the process of species competition affects species distribution and genetic diversity in coastal environments, we developed 10 polymorphic microsatellite markers for *S. polyschides*using an enriched library (microsatellites are already available for *L. digitata*). These loci showed from three to 24 alleles with heterozygosities ranging from 0.36 to 0.92. This polymorphism is high enough for fine-scale population analyses including assignment tests to determine the origin of recruits.