

## Microsatellites from *Rana dalmatina*

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### ABSTRACT

*Rana dalmatina* in Spain has a limited distribution in the north of the country and is very threatened, mainly by the loss of habitat. The surviving populations are separated by large barriers as a result of urbanization, agricultural fields, roads, etc. A study using polymorphic microsatellites will allow assessments of *R. dalmatina* phylogeography, genetic diversity, problems of inbreeding depression in the subpopulations, gene flow and the testing of whether metapopulations exist. The primary aim for these studies is to improve the conservation prospects of the remaining populations. First, we will construct a genomic library enriched in microsatellite loci. We will then characterise multiple loci and develop sets of primers for amplification of these loci by the polymerase chain reaction. *R. dalmatina* DNA will be purified and selected in the 300-700bp size range. Linkers will be added, then PCR amplification will be followed by hybridisation-selection of microsatellites, cloning, and screening for individual microsatellite loci. Polymorphism in these loci will then be measured in samples taken from the subpopulations, and analysed to assess levels of genetic diversity and differentiation. This project is defrayed by Aranzadi Society of Sciences and the University of Salamanca.