

Molecular Genetic Analysis of Populations

A Practical Approach

Edited by
A. R. HOELZEL

61109



The Practical Approach Series

SERIES EDITORS: D. RICKWOOD and B. D. HAMES



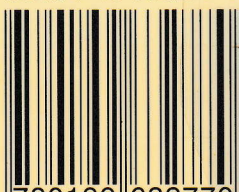
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Screening allozymes has been the dominant method for the analysis of genetic variation in natural populations since the 1960s, and indeed for some applications it is still the most appropriate technique. However, the advent of methods for investigating variation in the DNA molecule directly has increased the accuracy and resolution of population analyses, and facilitated a wide variety of studies relevant to population genetics. This book will enable researchers to analyse various genomic sequences simultaneously, and thus improve interpretation of their experimental data. Topics covered include allozyme electrophoresis, analysis of mitochondrial and chloroplast DNA, RFLP analysis, PCR amplification and direct sequencing, development of species-specific probes, DNA fingerprinting, and statistical interpretation of data. The emphasis is on protocols that save time and expense, facilitating the screening of large numbers of samples, and in every case the latest significant developments in the field are incorporated. This volume will be a useful laboratory manual for researchers involved in screening populations to determine variation, genetic distance, gene flow, effective population size, and other related parameters.

IRL PRESS
—at—
OXFORD UNIVERSITY PRESS
Oxford New York Tokyo

ISBN 0-19-963277-4



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