

Second Edition

 **WILEY-VCH**

Weinheim • New York • Chichester • Brisbane • Singapore • Toronto

**DOCKET  
ALARM**

Find authenticated court documents without watermarks at [docketalarm.com](https://docketalarm.com).

tellite polymorphic loci (SAMPL), a high-density → expression  
hybridization images of plant chromosomes on a background of  
polymerase chain reaction (PCR). These photos were kindly provided by  
Christina Staginuss (Plant Molecular Biology, Biocentre of Freiburg  
Scan Europe AG, Freiburg, Germany.

Library of Congress Card No. applied for

A catalogue record for this book is available from the British Library

Die Deutsche Bibliothek Cataloguing-in-Publication Data:  
A catalogue record for this publication is available from Die Deutsche  
ISBN 3-527-30100-3

Wiley-VCH Verlag GmbH, D-69469 Weinheim (Federal Republic of Germany)

Printed on acid-free paper.

All rights reserved (including those of translation into other languages).  
No part of this publication may be reproduced in any form – by photoprinting, microfilm or any other means –  
translated into a machine language without written permission from the publisher.  
The names of companies, products, and other names, trade-marks, etc. used in this book, even when not specifically  
mentioned, are to be considered unprotected by law.

Composition: pagina GmbH, Tübingen  
Printing: Strauss Offsetdruck, Mörlenbach  
Bookbinding: J. Schäffer, Grünstadt

Printed in the Federal Republic of Germany

third dye (e. g. ROX [red]), and run in temperature-controlled non-  
amide gels in an automated DNA sequencer. Mutations are detected as  
coloured peaks in the electropherogram. The technique allows to diagnos  
and → loss of heterozygosity, and works without radioactivity.

**Multiple gene DNA shuffling:** See → DNA shuffling.

**Multiple hit:** See → superimposed substitution.

**Multiple overlapping primer PCR:** A variant of the → PCR in situ hybridiz  
with overlapping sequences to generate large amplification products, th  
from their original location in cells or tissue specimens.

*Figure see page 512.*

**Multiple tissue Northern blot (MTN blot):** A ready-to-hybridize → North  
poly(A)<sup>+</sup>-RNAs (→ polyadenylated RNA) from a series of tissues of an c  
denaturing → agarose gel electrophoresis and blotted onto a nylon membr  
RNA per lane allow to detect tissue-specific expression of genes.

**Multiplex DAF:** See → multiplex DNA amplification fingerprint.

**Multiplex DNA amplification fingerprint (multiplex DAF):** A variant of t  
tion fingerprinting technique that uses at least two or multiple primer oli  
generate → amplification fragment length polymorphisms.

**Multiplex fluorescent in situ hybridization (M-FISH):** A technique for the s  
and discrimination of all different chromosomes in a metaphase spread by  
In short, chromosome-specific DNA libraries are first labeled with dis  
→ fluorochromes. Then the different, specifically labeled chromosomal D  
dized onto spreads of metaphase chromosomes (or cell nuclei), and the inc  
detected by epifluorescence microscopy (using all filters to excite all the  
sample) coupled to a cooled charge-coupled device (CCD) camera. The  
signals allow to unequivocally assign a specific fluorogram (i. e. colour)  
some.