parasitoids and inundation techniques. It appears that on this continent IPM programmes with a large biocontrol component are believed to achieve agricultural sustainability while minimizing ecological risks.

All three chapters are rather descriptive, although the subtitle of the book suggests a more analytical and synthetic approach. IPM is dealt with as a technical concept and not as a developmental concept to change crop protection in developing countries. One of the missed chances in the book is a thorough analysis of the role of extension in relation to IPM. This relation is in particular critical for resource-poor farmers, growing a large variety of crops and hardly using external inputs. Although the authors discuss problems with IPM implementation, they do not analyse their causes such as improper problem identification, poorly targeted IPM research and inadequate extension methodologies and approaches. There is also little attention to institutional aspects of IPM and the role of the pesticide industry. In the last chapter an attempt has been made to summarize the book. However, the impression of a fragmented collection of useful and interesting data remains.

A. Van Huis, F. Meerman Wageningen Agricultural University Department of Entomology P.O. Box 8031 6700 EH Wageningen The Netherlands

PII S0304-4238(96)00929-6

Avocado descriptors

Descriptors for Avocado (Persea spp.). International Plant Genetic Resources Institute, Rome, Italy, 1995. Paperback, both english and spanish (Descriptores para aguacate). Price: apply IPGRI. 52 pp., with ill. ISBN 92-9043-220-9.

With the long series of descriptors IPGRI (formerly IBPGR, International Board for Plant Genetic Resources) has an exemplary role in formalizing passport and evaluation descriptors. Many major food crops and several other economic crops, have been treated in this series. For anyone working with avocado in horticulture and breeding, it is a necessary tool for distinction of cultivars and breeding lines, as it amalgamates the knowledge and skill of four authors and 11 other contributors from Israel, Mexico, Honduras, Cyprus, Germany and the USA, most of which are important avocado-growing countries, and hence the bilingual issue.

The descriptors fall into 5 categories: Passport, Management, Environment and Site, and Characterization, while Further Evaluation requires replicated trials. Each researcher should select those descriptors useful for his or her purpose, but of course communica-

tion is best served if the proposed descriptor classes are used, and which are obviously written in consensus. As always the experts of the major research organizations working on the crop have been included.

This booklet follows the common style of IPGRI Descriptors, which has evolved over the years. Since the first booklets were produced (in my collection the Sorghum descriptors of 1980 are the oldest, and of this there has been a second edition) the execution has much improved. The cover is in colour, and the schematic illustrations showing the various classes are quite clear. However, Fig. 14 does not show the style of the flower pistil, covered by descriptor 7.2.16, of which class 2 (kinked) vs. class 1 (straight) is not immediately self-explanatory. Most classes are clear for general, non-avocado botanists.

A must for all avocado adepts.

L.J.G. van der Maesen Departnent of Plant Taxonomy Wageningen Agricultural University POB 8010 6700 ED Wageningen Netherlands

PII S0304-4238(96)000932-6