

Orchids and conservation in tropical Africa and Madagascar

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ABSTRACT

The importance of orchids to the cause of conservation is stressed. Progress in the cataloguing of the orchids of tropical Africa is reviewed and it is concluded that the orchid flora is incompletely known. It is suggested that, to aid the conservationists, authoritative checklists for each country be produced as a prior step to the writing of floristic accounts.

RÉSUMÉ

ORCHIDÉES ET CONSERVATION EN AFRIQUE TROPICALE ET À MADAGASCAR

L'importance des orchidées dans les objectifs de la conservation est soulignée. Les progrès réalisés dans l'inventaire des orchidées d'Afrique tropicale sont passés en revue et il en est conclu que leur connaissance est encore incomplète. Afin d'aider les responsables de la conservation il est suggéré que des catalogues soient préparés pour chaque pays par des spécialistes de la famille avant d'entreprendre leur traitement pour les flores.

Orchids among plants have popular appeal in much the same way as tigers and pandas have in the animal world. In temperate countries such as the U.K., U.S.A. and Japan, conservationists have realised this and have effectively used orchids as an emotive symbol to ensure the protection of threatened environments. The similar use of orchids in tropical countries has been severely hampered by our lack of knowledge of the orchid floras of such regions. Africa is no exception. I would, therefore, like to look in a little more detail at current progress in the cataloguing of the orchids of tropical Africa.

For convenience I will divide tropical Africa into four regions each with a large endemic element and will also consider Madagascar separately.

1. *West and Central Africa.* Summerhayes's (1968a) account of the Orchidaceae in the Flora of West Tropical Africa remains the most useful means of identifying orchids throughout this region. It is still relatively comprehensive for West Africa, although many additional records from former French colonial countries need to be added. For example, Perez-Vera & Cribb (1975) doubled the number of species recorded for the Côte d'Ivoire.

Summerhayes (1968a) is also useful for the Cameroun although far from comprehensive. Sandford has written half of the orchid account for Flore de Cameroun but it has yet to be published. F. W. T. A. Orchidaceae is also useful in Central Africa if supplemented by the Flora of Tropical East Africa Orchidaceae (Summerhayes, 1968b and Cribb, in press), by various papers by Geerinck (1974, 1976, 1977, 1979, 1980) and by Williamson (1977), the last being particularly useful for the orchids of Southern Zaire and Burundi.

2. *Ethiopia.* A checklist of Ethiopian orchids was published by Cufodontis (1972) but it is incomplete. Plans are now well advanced to publish a new Flora

of Ethiopia and the orchid account will be jointly written by Copenhagen and Kew. Meanwhile, Summerhayes (1968b) and Cribb (in press) will be useful for all but *Eulophia* species and angraecoid orchids. Similarly, Stewart (1974) contains many species also found in Ethiopia.

3. *Tropical East Africa.* The only relatively comprehensive account of East African orchids remains that of Piers (1968) but, although useful, it is now outdated. Progress with the Flora of Tropical East Africa accounts has been slow but steady since Part 1 (Summerhayes, 1968b) with Part 2 (Cribb, in press) expected later this year and part 3 due to be completed by 1984.

Judging from the results of recent expeditions to Tanzania a great deal still remains to be discovered of its orchid flora which is rich in endemics.

4. *South Central Africa.* Probably the most useful and readily available account for this area is Williamson (1977), which covers the flora of Zambia and to a lesser extent northern Malawi. Checklists exist for Angola (Schelpe, 1976a), Mozambique (Schelpe, 1976b) and Zimbabwe (Grosvenor, 1976).

The epiphytic species of Malawi are dealt with by Morris (1970), but this is now outdated and has been superseded by a more comprehensive account by La Croix *et al.* (1983). Ball (1978) is also useful here and elsewhere in southern Africa.

So far, no start has been made on the Orchidaceae account for Flora Zambesiaca which, presumably, awaits the completion of the FTEA account.

5. *Madagascan area.* The last account of this unique and grossly endangered orchid flora was that of Perrier de la Bathie (1939–41) in Flore de Madagascar. It is now grossly outdated, inaccurate and difficult to use. A new account is desperately needed.

Preparation of an account of the Mascarene species by Bosser is, I believe, well advanced.

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As can be seen, the orchid flora of tropical Africa, despite being much poorer than that of the tropical Americas or Asia, is still incompletely known. This is despite the popularity of orchids in horticulture and their appeal to generations of field naturalists.

If the orchids can be used, as I believe, to promote interest in endangered floras then surely they deserve some priority. Apart from anything else, it makes financial sense to publish orchid accounts as quickly as possible for they easily outsell the others. As a first step then, prior to the writing of floristic accounts, I believe that authoritative checklists for each country should be produced to aid the conservationists who, without these, cannot use these vote winning plants.

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