

## Botanical Literature

GALLØE, O. (†), *Natural History of the Danish Lichens. Original Investigations Based upon New Principles. Part 10.* Ed. M. SKYTTE CHRISTIANSEN. — Copenhagen 1972. 63+204+7 pp. 204 plates (50 in colour) comprising 1336 figures. Price D. Cr. 125:— (wrappers).

The present volume completes the magnificent work on the lichens of Denmark issued by Dr. O. GALLØE. From the preface of Vol. 1 (1927) we may cite some of his "new principles" which, in fact, have given his treatise a very unique position in lichenological literature.

Like LAMARCK he believed in the inheritance of qualities acquired by a single individual under the direct influence of external conditions. It is evident that such ideas will lead to a plastic species concept. Instead of defining the outlines of the lichen species in the traditional way, as we find in most floras and monographs, GALLØE selected one "typical" specimen (sometimes 2 or 3, in exceptional cases more) which he described in detail (in particular the microscopic anatomy) and figured in numerous drawings in colour or black-and-white. GALLØE was an excellent artist. Many of his illustrations are unrivalled and have often been reproduced in other lichenological textbooks.

At least in the earlier volumes GALLØE had a broad species concept somewhat similar (especially as regards the macrolichens) to the delimitation used by TH. M. FRIES (*Lichenographia Scandinavica*, 1871—1874).

In his later volumes he sometimes considered recent literature. He had no interest in nomenclature, typification, synonymy, variation (except for the differences discerned when more than one

standard specimen was described), distribution, lichen chemistry, etc. Apart from the localities of the standard specimens there are no records of geographical distribution. In spite of these shortcomings the reviewer believes that GALLØE's *Natural History* will remain an indispensable lichenological work.

Volume 9 (*Cladonia*, 1954) was the last to be issued by GALLØE himself. When he died in 1965 he had completed the 50 colour plates of the final volume, 10, with their legends. He was working on the black-and-white figures but did not finish the corresponding legends. The publication of this volume was entrusted to M. SKYTTE CHRISTIANSEN who had aided GALLØE in many respects since the 1940's. Vol. 10 deals with the lichens known as Pyrenocarpeae, Coniocarpineae and Graphidineae. Cyclocarpineae, the main group in the classical ZAHLBRUCKNER system, is represented by the genus *Stereocaulon* only.

CHRISTIANSEN has paid much attention to the genus *Verrucaria*. GALLØE has reproduced several specimens collected by him and determined by him, often in cooperation with the late Czechoslovak lichenologist M. SERVIT. The latter was known for his "narrow" species often described on one single individual. GALLØE's figures are splendid as usual, and the descriptions are often detailed. There are no keys, however, as always in this work nor is there any discussion on the delimitation of the species. It is evident that we are still far from a stable taxonomy of this notoriously difficult genus.

At the end of this volume we find an index to all species (a total of 530) treated in the 10 volumes. As has been emphasized, GALLØE's species concept and nomenclature often differ widely from

current usage. A correlation of GALLØE's specific epithets to modern concepts would have been highly desirable. It is to be hoped that such a revision will be possible in the future.

Lichenologists owe many thanks to M. SKYTTE CHRISTIANSEN for his careful work for the publication of Vol. 10. Generous contributions from the Carlsberg Foundation have defrayed part of the high costs of the reproduction of the plates and the printing. Hence it is possible to sell this monumental work at a reasonable price. Copies of the complete series are available from Mrs. E. GALLØE, Bogmosen 15, 2890 Hareskovby, Denmark. Price D. Cr. 1000:—.

OVE ALMBORN

CAROLL W. DODGE: *Some Lichens of Tropical Africa. V. Lecanoraceae to Physciaceae.* — Beihefte zur Nova Hedwigia 38. Lehre 1971. 225 pp. No illustrations. Price DM 100:— (wrappers).

During the years 1953—1959 Dr. C. W. DODGE (Burlington, Vermont, U.S.A.) published a series entitled "Some lichens of Tropical Africa I—III. (Annals of the Missouri Botanical Garden 40—46). A continuation (Vol. IV) appeared in Nova Hedwigia 12 (1964). Cf. review in Bot. Notiser 118 (1965) p. 131. The present volume concludes this series.

The revision is founded on material received by the author from various sources, especially from the Herbaria in Kampala (Uganda), Nairobi (Kenya) and Salisbury (Rhodesia). It is to be regretted, however, that there is often no indication of where the specimens seen are preserved. Though the author always refers to type localities for the species treated he seldom cites any Herbaria. As several new taxa are described it would have been especially important to have information about the location of their types. Cf. Recommendation 37 B in the Code of Nomenclature.

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As the reviewer pointed out in 1965 it is evident that the author has seen very few type specimens. He has identified his material with the aid of keys compiled from the literature. The keys often include only species described from Africa, whereas several species described from other parts of the world have been omitted though they occur in Africa. This is the case with *Xanthoria parietina*, for example, which is a fairly common species in parts of South Africa.

In many cases, subspecific taxa have been raised to specific level. Such a procedure demands an investigation of the type material.

Several of the many new combinations made are quite puzzling to the reviewer, e.g. "*Teloschistes capensis* var. *cine-rascens*". As this "variety" (probably an environmental modification only) is said to be sorediate and to have eciliate apothecia it is definitely to be referred to *T. flavicans*.

ALMBORN, *Lichenes Africani* No. 69 issued as *Caloplaca subnitida* (MALME) ZAHLBR. has been identified by DODGE as *Gasparrinia platyna* (ZAHLBR.) DODGE. The reviewer has seen the types of both species. He can state with assurance that the latter is identical with *C. cinnabarina* (Sw.) ZAHLBR. This species, one of the most conspicuous lichens in South Africa, is not mentioned in any way.

In many cases important literature references have been overlooked. One example only. "*Alectoria chalybeiformis* f. *terrestris*" described by STIZENBERGER from South Africa appears in the key, and another collection from Uganda is referred to the same taxon. The type material (in Herb. ZT) is a mixture of algae (KESSLER in RABENHORST's Kryptogamenflora IX. 5: 1 (1960) p. 129). D. HAWKSWORTH has since confirmed this.

As previously the author has paid too little attention to formal detail. We often find an arbitrary alternation between masculine and female endings (e.g., in *Teloschistes*). *Triophthalmidium* (a typi-