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# TAIWANIA

The pollen morphology of plants including 10 families, 230 genera, and 441 species are reported in this paper, although some of them were also studied by botanists (Shieh, 1964; Ueno, 1962; Yang, 1962) in the past. In addition to previously cited references, the scientific names used in this paper are adopted from the following publications: Cheng (1961), Chuang and Huang (1965), Kuo (1965), Ohsui (1965), and Raven (1967). The descriptions of each family is arranged in alphabetical order. Throughout the paper, the signs A, B, C, D, E, and F in the 72 plates were designed to indicate: A, equatorial view; B, polar view; C, exine stratification; D, sexine pattern; E, grains without definite view; and F, tetrads or polyads grains. The writer wishes to express his sincere gratitude to Dr. David R. Hunt, Department of Botany, University of Missouri, U.S.A. for his review of this manuscript, and Mr. C. Y. Chen for his drawings.

## OBSERVATION

### 1. ANGIOSPERM POLLEN—Plate 1

Pollen grains 2-8-calpate or 3-calporate, prolate to spheroidal or ellipsoidal, with P axis of 17-24 $\mu$  long, and with E diameter of 17-25 $\mu$  wide, or with longer diameter of 17-21 $\mu$  wide. Amb. distinct. Colp. long. Apertures 2-4-curve, and colp. unilobulate. Exine thickness 1-2 $\mu$  thick. Sexine granulate, with LD-pattern. Tectum with crenate process from side view. Sexine thinner than sexine.

Most genera and most species were studied.

### Key to genera

- 1. Grains 4-calpate ..... *Asplenium*
- 1. Grains 3-calpate or 3-calporate ..... 2
- 2. Grains 2-calpate ..... *Saxifraga*
- 2. Grains 3-calpate ..... *Asplenium*
- 2. Grains prolate-spheroidal to spheroidal; P axis 20-24 $\mu$  long ..... *Taraxacum*

TAIWANIA is published annually by the Botany Department of the National Taiwan University.

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