M. Reille: POLLEN ET SPORES D'EUROPE ET D'AFRIQUE DU NORD; *Laboratoire de Botanique historique et Palynologie, Marseille 1992, 543 pp., 13047 photos. Price FRF 1600.-, ISBN 2-9507175-0-0;* **POLLEN ET SPORES D'EUROPE ET D'AFRIQUE DU NORD, SUPPLEMENT 1;** *Laboratoire de Botanique historique et Palynologie, Marseille 1995, 331 pp., 8082 photos. Price FRF 800.-, ISBN 2-9507175-1-9*

In every palynological laboratory it is necessary to have a well organized reference collection of pollen from the area under study plus the relevant available literature with pollen keys and illustrations. Before these two remarkable publications on pollen were issued several frequently used books were the standard references for pollen analysts and students interested in this field for the determination of the palynomorphs – FAEGRI K. & IVERSEN J. (1989): *Textbook of pollen analysis*, Ed. 4., Chichester; MOORE P.D., WEBB J.S. & COLLINSON M.E. (1991): *Pollen analysis*, Ed. 2., London; ERDTMAN G., BERGLUND B. & PRAGLOWSKI J. (1961): *An introduction to a Scandinavian pollen flora* 2: 3, 1-92 pp., 74 plates. These books, however, contained only the main types of pollen and spores, the photographic documentation of which was inadequate. Further information was possible to find in the seven volumes of the Northwest European pollen flora (PUNT W. et al. 1976, 1980, 1981, 1984, 1988, 1991, 1996).

These two publications by M. REILLE (1992, 1995) are ideal for daily use by anybody working with pollen and spores and studies them in detail. The first publication presents 2 276 taxa (900 genera representing 186 families) from Europe and North Africa following the nomenclature of *Flora Europaea* (TUTIN T.G. et al. 1964, 1968, 1972, 1976, 1980) and the second one, Supplement 1, covers 1615 taxa (581 genera of 114 families). Both emphasises the main aim of the author which is to illustrate at least one species of each genus described in *Flora Europaea*. Both publications conclude with three indices viz: species, families and pollen types, in alphabetical order.

The number of taxa in the photographs varies from two to ten or more according to the character of the palynomorphs at different focal depths. The photographic series for a single taxa show very clearly the morphological features of each grain. The author's approach emphasizes the great importance of LO (light – obscurity analysis) for the precise interpretation of the pollen wall morphology. For this purpose the principles of LO are clearly explained and illustrated with comprehensible drawings in the first atlas (REILLE 1992). The pollen grains are presented at the scale of one millimeter representing one micrometer. Pollen grains larger than 100 µm are magnified 500× and a few photos of the exine of certain species have even higher magnifications. A scale bar is added to each plate.

Both volumes are recommended to a large spectrum of scientists including the paleoecologists, the quaternary biostratigraphists, the taxonomists, the plant biologists, the archaeobotanists, the melissopalynologists and the allergologists.

Helena Svobodová