REVIEW

B.A. ROBERTS & J. PROCTOR (Eds.): The Ecology of Areas with Serpentinized Rocks. A World View. Geobotany 17 (Series editor M.J.A. WERGER), Kluwer Academic Publishers, 1992. 427 pp., several photographs. ISBN 0-792-30922-7. Price Dfl. 350.00 (hardcover).

The recent surge of interest in plants growing over serpentine is reflected in a spate of papers on the subject, so much so that it is difficult to keep track of what has been published. The present volume is an attempt in that direction. Both editors can glory in a long career of research on serpentine plants.

The term serpentine is often used to denote a wide range of ultramafic rocks which are characterized by high concentrations of toxic heavy metals (Cr, Co, Ni), high Fe and Mg and low Ca and Si concentrations. The vegetation growing on serpentine often shows a striking contrast with surrounding vegetations on different soils. The stature is mostly low, xeromorphic structures prevail and floristic diversity is usually low, although endemism may be quite high.

The book consists of a number of sections, the first two are of a general nature: an introductory chapter by the two editors and a chapter on the geology of serpentinized rocks by J. MALPAS. This is followed by a series of regional discussions. Section III deals with North America and contains a paper by A. KRUCKEBERG on western North American ultramafics. Section IV contains four papers on Europe. Section V covers the Far East (including New Caledonia) and Japan. JOHN PROCTOR discusses what is known about the ultramafic vegetation of New Caledonia (by far the best documented), New Guinea, the Solomons, Sulawesi, Talaud, Sabah and the Philippines and points out the wide range of vegetation types that can be found in the region, varying from low stunted shrubberies to species-rich tall rain forest. Section VI contains two papers on Africa and Section VII covers Australasia with papers on West Australia and New Zealand.

In the regional treatment I missed South and Central America. Apart from this omission, the editors are to be complimented on bringing together much scattered information in a handsome, albeit rather expensive, volume. The study on serpentine plant ecology has a bearing on pollution problems caused by mineral waste and as such has practical implications.

M.M.J. VAN BALGOOY