This volume is a revised, English language version of the original which was published in Japanese in 1977. Fifty-six contributors are responsible for the 39 chapters. Authors names are listed at the beginning of the volume but not at the beginning of the chapters which they have written. This makes it something of an effort to decide who has written what.

The intention of the editors is to provide a guide to techniques used in the detection, separation and identification of natural products. In an attempt to achieve this they have invited a large number of Japanese chemists to describe the methods used in their individual research projects. The result is a collection of reports of uneven quality strung together loosely by the theme of physiological activity.

The first 3 chapters are concerned with macrolide, nucleoside peptide and bleomycin-phleomycin antibiotics. Peptides from Actinomycetes which act as protease inhibitors and toxins from pathogenic fungi that affect plants, insects and mammals are then discussed. A contribution on the use of stable isotopes in biosynthetic studies is then included, followed in turn by chapters on flycidal mushrooms, red-tide toxins and phytoalexins which are confusingly referred to as ‘abnormal secondary metabolites in plants’.

The extraction and characterisation of germination inhibitors, growth inhibitors and gibberellins from higher plants are then considered. Insect antifeedants, fish poisons from plants, the biosynthesis of secoiridoid glucosides, the isolation of triterpenoid and steroid saponins and the cleavage of glycoside linkages now command our attention. Alkaloids from Japanese plants, cardiac glycosides, the constituents of plant tissue cultures, of marijuana and of Chinese drugs are followed by information on the structure of conjugation-inducing gamones, the wing-raising pheromone of the German cockroach, ecdysones from plants, marine toxins, bioluminescent substances, toad poisons and finally bovine rhodopsin.

Individual chapters in this volume are clearly of value to specialists. The intention to provide a guide to techniques in natural products chemistry has, however, been lost in a wealth of detail and the failure of the editors to insist that their authors address themselves to the main theme.

I cannot recommend this work with enthusiasm, but individual chapters will undoubtedly be of value to specialists.

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