which (excluding weeds and cultivars) boils down to some 128 mostly native mesophytes, of which the representatives in the two areas apparently are identical in 64 instances, intraspecifically different in 25, and classifiable as related but distinct species in 39. Hara emphasizes that the Himalayan plants are in general adapted to a milder climate than that of Japan, lacking the severe insular winters, and calls attention to the total absence in Eastern Himalaya of the characteristic Japanese temperate deciduous forest.

"Although Eastern Himalaya and Japan are now widely separated, the floras of both regions are considered to have been derived from the common flora of the Tertiary which had covered whole East Asia including Himalaya, China, and Japan." These environmental and geographical changes, which must have been most intensive during the period of Quaternary glaciation, caused the taxa to differentiate in somewhat different directions. "Thus, to compare critically various corresponding taxa which are now found in Eastern Himalaya and Japan gives important data on the origin of the Japanese flora and the evolution of the plant groups involved in the flora."

For those who have been interested in comparing the flora of Japan either with that of the eastern United States and Mexico or with that of the Pacific Coast of North America, this attractive book adds a whole new dimension.

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Tools for Taxonomists

Botanical Latin. History, Grammar, Syntax, Terminology, and Vocabulary. WILLIAM T. STEARN. Hafner, New York, 1966. 580 pp., illus. $16.75.

An English-Classical Dictionary for the Use of Taxonomists. ROBERT S. WOODS. Pomona College, Claremont, Calif., 1966. 345 pp. $5.50.

The International Code of Botanical Nomenclature decrees that, in order to be validly published, any name of a new taxon of plants (bacteria and fossils excepted) must be accompanied by a diagnosis or description in Latin or by a reference to a previously published description in the same language. In order to supply such validating diagnoses, botanists are therefore obliged either to acquire a sufficient knowledge of the grammar and vocabulary of Latin to do this themselves or to have recourse to outside scholarly help. Add to this the fact that Latin was the standard language for botanical texts from the time of Linnaeus up to about a century ago, and it becomes obvious that all taxonomic botanists should be equipped with a knowledge of the language. Stearn's book supplies a most valuable working tool to enable those who are not classical scholars to construct intelligible diagnoses and descriptions and to understand the fundamental information contained in earlier works. After a sketch of the historical development of botanical Latin terminology, the author proceeds to a condensed outline of the grammar and syntax and gives standard sample descriptions in Latin of representatives of various plant groups, from algae to angiosperms, with additional chapters on color terms, habitats, geographical names, general descriptive terminology, and so on. A comprehensive vocabulary, with both Latin and English equivalents alphabetically arranged, contains all the terms commonly used in botanical Latin, with exact definitions. The excellent line drawings included in the text facilitate exact understanding of many of the technical terms employed. Apart from its practical value, this remarkably erudite and carefully constructed treatise is entertainingly written and contains much interesting information on the evolution of the Latin language as a medium of botanical communication. It is only to be regretted that such an outstanding and faultless scholarly work should be marred by the incredible carelessness of the publishers in misspelling Stearn's name on the cover.

Woods's *English-Classical Dictionary* contains, with their literal Latin and Greek equivalents, all words occurring in lexicons of those languages which are or could be used in taxonomic nomenclature. Insofar as possible, ambiguous terms are avoided. The chief use of the book to botanists and zoologists will be as an aid in the selection and construction of suitable epithets for new taxa. Grammatical notes are restricted to a table of case terminations in Latin and Greek, with equivalents. Greek words are transliterated into Roman characters; it would have been useful to include also the Greek alphabet for the benefit of those totally unfamiliar with that language. The typography is good, with the key words in clear bold-face letters.

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Biological Self-Regulation

Living Control Systems. L. E. BAYLISS. Freeman, San Francisco, 1966. 199 pp., illus. $5.

This posthumous book by a noted physiologist attempts to present an introduction to the theory of control systems (more particularly, servomechanisms) with illustrative material drawn chiefly from muscular and physiological responses. The approach is chiefly qualitative, with a supplemental chapter on the elementary mathematics of servo systems at the end of the book. On the whole, the author is quite successful in introducing the reader to such concepts as proportional control, integral control, linear and nonlinear transfer functions, stability, and damping on an intuitive basis, assuming a minimum of mathematical sophistication. This will probably be a welcome opportunity for many students in biological sciences to learn something of this subject without having to tackle one of the more formidable engineering-oriented textbooks. Occasionally, however, the more sophisticated reader may find himself irked by the obvious circumvention of an equation or formal definition in an attempt to avoid mathematical statements, and since the author does assume some scientific background it may be that he has leaned too far in this direction.

The book is primarily a statement of general principles and should not be construed as a thorough review of the application of these principles in living systems. With the growing interest among biologists in such phenomena as genetic induction and inhibition, enzyme kinematics, and control functions of the central nervous system, it is perhaps unfortunate that there are not more examples from these fields, although the choice of such traditional examples as stretch reflexes, iris con-