## **Rosa** Taxonomy and Hierarchy of Markers Defined by ACT STATIS

C. Grossi, O. Raymond, C. Sanlaville-Boisson and M. Jay

GROSSI Cédric, Laboratoire de Biologie Micromoléculaire et Phytochimie, Université Claude Bernard Lyon I, 43, bd du 11 novembre 1918, 69622 Villeurbanne Cedex, France

Z. Naturforsch. **54c**, 25–34 (1999); received July 10/September 7, 1998

ACT-STATIS Method, Markers Hierarchy, Multivariate Analysis, *Rosa* Taxonomy

The ACT STATIS method, a multi-table comparison, was applied to 62 *Rosa* species to be clustered into four sections (Carolinae, Cinnamomeae, Pimpinellifoliae and Synstylae); the data sets were dealing with morphology (15 criteria), anthocyanin pattern (10 compounds), flavonol heteroside pattern (26 compounds) and superoxide dismutase isozyme (SOD) polymorphism (11 bands). This method appeared very powerful to recognize the rose sections and to set up a marker hierarchy which places at the first level the flavonol heteroside pattern, then the morphological data, the SOD isozyme data and finally the anthocyanin pattern. The correlation studies between the markers underlined the relatively common view

by means of flavonol patterns and the morphological features.

Reprint requests to Dr. Grossi. Fax: (334) 72-43-14-26, e-mail: phytochi@biomserv.univ-Lyon1.Gr