Synthetic Taxonomy of *Rosa* Races Using ACT-STATIS

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Rosa, ACT-STATIS, Taxonomic Congruence

Fifteen Rosa cultivated races were described by means of phenotypic frequencies (11 tables). Two groups of correlated contingency tables were identified by ACT-STATIS (Analyse Conjointe de Tableaux – Structuration de Tableaux à Trois Indices de la Statistique) interstructure analysis. Three data sets appeared to be independent from the others. Typologies of races were obtained after ACT-STATIS compromise analyses for the two groups of correlated tables, and after Principal Component Analyses for the independent data sets. Each typology was original and variously influenced by genealogical structure, mutation or artificial selection pressures. A weighted synthesis was attempted in order to build a taxonomy of races taking into account these diversity factors. The good agreement between the resulting classification and the assumptions about the history of Rosa domestication advocated for a wider utilization of ACT-STATIS and RV coefficient when the relationships between individuals or populations have to be studied on the basis of their similarities.