



كلية العلوم



جامعة الفيوم

Abd El-Ghani, M.A., **Karam, M.**, Abd El-Baky, F. and Ali, R., 2011. Taxonomic relationships in *Veronica* sect. *Beccabunga* (*Plantaginaceae* sl) of Egypt: evidences from morphometric and molecular analyses. *Phytologia Balcanica*, 17(1), pp.35-44.

#### Abstract

There has been a great deal of controversy regarding the taxa and their taxonomic status of *Veronica* sect. *Beccabunga* in Egypt. The present study aimed at critical reappraisal of the taxonomy of *Veronica* sect. *Beccabunga* in Egypt by numerical and molecular approaches. Representative specimens were collected from their natural habitats and subjected to morphological description and RAPD amplification, using five random primers. Cluster analysis was applied to morphological and RAPD data separately. Numerical analysis of morphological and molecular data has led to discrimination of *V. anagallis-aquatica* var. *anagallis-aquatica* and *V. anagallis-aquatica* var. *nilotica*. Three subspecies of *V. anagalloides* were recognized: *V. anagalloides* subsp. *taeckholmiorum*, *V. anagalloides* subsp. *anagalloides* and *V. anagalloides* subsp. *heureka*. *Veronica catenata* can be represented by *V. catenata* subsp. *pseudocatenata* and *V. catenata* var. *catenata*. The identification of *V. scardica* subsp. *africana* was confirmed, and *V. beccabunga* was recorded, which is mainly confined to the Mediterranean region. Specimens collected from the Fayoum depression, tentatively identified as *V. kaiseri* – a species considered endemic to the Sinai Peninsula – show distinct RAPD patterns.