COMPARATIVE MORPH-ANATOMICAL LEAF CHARACTERS OF NERIUM OLEANDER AND CATHARANTHUS ROSEUS FAMILY (APOCYNACEAE)

Mustafa Mubarak Abdalla, Ahlam Salih Eltahir* & Hatil Hashim El-Kamali Botany Department, Faculty of Science and Technology Omdurman Islamic University, Omdurman, SUDAN

*ahlam.eltahir@yahoo.com

ABSTRACT

The present study reports the morphology and anatomy of the leaves of two well known medicinal plants in Sudan; *Nerium oleander* and *Catharanthus roseus* family (Apocynaceae). Morphologically, the two studied species have green leaves with entire margins, acute apex and reticulate venation. Radar shape for leaf length, leaf width, leaf apex angle and leaf base angle showed that these characters are correlated for each species. Anatomically, the two species have anisocytic stomata. *N. oleander* leaf showed larger number of epidermal hairs and four layers of epidermal cells, calcium oxalate crystals, sunken stomata and isobilateral leaves. Leaves of *Catharanthus roseus* are of smaller number of epidermal hairs, one layer of epidermal cells and the leaf is dorsiventral. The vascular bundles of the two species are bicollateral.

Keywords: Leaf, morphology, anatomy, Nerium oleander, Catharanthus roseus.