

**Comparative Taxonomic Study of *Balanites aegyptiaca* (L.) Delile
(Zygophyllaceae)**

Abstract

Balanites aegyptiaca or Desert Date (Zygophyllaceae) is widely distributed in arid and semiarid regions in Africa and South Asia. The current study aims to identify the infraspecific variation between *B. aegyptiaca* native to Egypt and Saudi Arabia. Detailed macro- and micromorphological analyses of leaflets, petioles, stems, spines, and fruits were performed using a light and Scanning Electron Microscope (SEM). Statistical analysis was performed by using the relevant R- software packages. Leaflet shape and apex, leaflet length/width ratio, leaflet indumentum density, and the petiole length were recorded. Based on those traits, the present study suggests the existence of one variety, "*B. aegyptiaca* var. *aegyptiaca*" in Makkah, Saudi Arabia. At the same time, two varieties were recorded in Egypt "*B. aegyptiaca* var. *aegyptiaca* and *B. aegyptiaca* var. *tomentosa*".