

**Germination and Seedling Characteristics of *Moringa Oleifera*
(Lam.) from Different Sites in Egypt.**

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ABSTRACT

The aim of this paper is to study the effect of seed source and soil type on growing *Moringa oleifera* in Egypt. Germination percentage varied highly significantly among the seeds collected from the five studied sites (Sheikh Zuweid Station, Qanatir Horticulture Research Institute, Ain Shams University - Faculty of Science Botanic Garden, Orman Botanic Garden and Aswan Botanic Garden). The seeds of Sheikh Zuweid recorded the highest germination percentage (98.7%). Seedlings were grown in five soil mixtures and growth parameters were measured weekly (The experiment lasted for 4 weeks). Seedling height was more significantly affected by the type of soil mixture than the no. of leaflets. Also, the seed source affected significantly on the measurements of the previous two parameters and highly significantly on root length, no. of root branches and dry weight. The seedlings grown from Sheikh Zuweid seeds had the maximum values of growth parameters. Seedlings grown in sandy soil recorded the maximum values of seedling height (29.0 cm), root length (8.0 cm), no. of root branches (17.3 branch root⁻¹) and dry weight (0.16 g seedling⁻¹). The results revealed that *M. oleifera* seedlings can be easily grown in many soil types, but it prefers sandy well drained type.

Keywords: Imbibition, Seed coat, Height, Leaflets number, Root, Dry weight.