Micromorphological studies on the genus Lotus L. (Fabaceae: Loteae) from Egypt.

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Abstract:

Trichomes, epidermal cell features, and seed coat sculpturing of 12 Lotus taxa from Egypt were studied using scanning electron microscopy. In addition, statistical analysis for the taxa under investigation was carried out. The results revealed that trichomes have high taxonomic significances between studied taxa. Anticlinal and periclinal cell walls and epidermal cell shape for the stem, leaf, and calyx for each taxon were examined. Seed coat sculpturing exhibited 4 main different surface patterns categories: rugose, reticulate, sulcate, and verrucate. These features can serve as good diagnostic characters at the species level of the genus Lotus.

Keywords:

Fabaceae, Lotus, seed, scanning electron microscopy, trichomes, Egypt

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