

عنوان مقاله:

Foliar micromorphology of the family Lythraceae in Iran with special emphasis on the genera Lythrum, Ammannia, and Rotala

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خلاصه مقاله:

In the present survey, leaf micromorphological characters of ۱۴ species belonging to three genera viz. Lythrum, Ammannia, and Rotala (Lythraceae) were analyzed using scanning electron microscopy (SEM). The results revealed two types of trichomes, three types of the papilla, nine types and five sub-types of epicuticular wax ornamentation, three types of anticlinal wall and outer periclinal layer, four types of outer stomatal rim/peristomatal rim pattern on both sides of the leaf surfaces. These characteristics are quite useful from taxonomic point of view. Based on the micromorphological characteristics of the leaves, an identification key is also provided for the studied species. Numerical analyses (unweighted pair-group method with arithmetic averages and principal components analysis) was used to find out the similarities and micromorphological correlations among the studied taxa. The present study revealed the alliance of eight Lythrum species, while some traits overlap between Ammannia, Rotala, and three Lythrum. The results also showed that, numerical analyses of leaf micromorphological traits is unable to determine the delimitation of the studied genera

کلمات کلیدی:

epicuticular wax, epidermis, multivariate analysis, scanning electron microscopy, Taxonomy

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