



## Accumulation and Distribution of Diterpenic Acids in Leaves of *Montanoa tomentosa*

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**SUMMARY.** *Montanoa tomentosa* has been used for at least last five centuries in traditional medicine in Mexico as a remedy for reproductive impairments. The accumulation of diterpenic acids in *M. tomentosa* leaves was determined. Using Scanning Electron Microscopy, the type and distribution of glandular trichomes (GTs) was observed on the abaxial and adaxial sides of leaves. GTs and non-glandular trichomes (NGTs) were observed on leaf surface, but the latter are confined to the leaves abaxial side. On the adaxial surface, only non-glandular trichomes were observed. Accumulation in GTs and leaf lamina of kaurenoic (KA) and grandiflorenic (GFA) acids was determined by Gas Chromatography coupled to an Electron Impact Mass Spectrometric Detector (GC/EI-MSD). GC-MSD analysis indicated that GTs accumulated KA and GFA, with KA accumulation being at a higher level than GFA in these structures. Attention on GFA and KA is due to their importance as plant growth regulator precursors with potential pharmacological applications.

**KEY WORDS:** Asteraceae, Glandular trichomes, Grandiflorenic acid, Kaurenoic acid, *Montanoa tomentosa*, Zoapatle.

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