Major Constituents of the Foliar Epicuticular Waxes of Species from the Caatinga and Cerrado

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The epicuticular waxes of leaves of four species (Aspidosperma pyrifolium, Capparis yco, Maytenus rigida and Ziziphus joazeiro) from the Caatinga, (a semi-arid ecosystem of Northeast Brazil) and four species (Aristolochia esperanzae, Didymopanax vinosum, Strychnos pseudoquina and Tocoyena formosa) from the Cerrado, (a savanna ecosystem covering one third of the Brazilian territory), were analyzed. Six species contained a high content (above $60 \,\mathrm{\mu g.cm^{-2}})$ of wax, four of them from the Caatinga. Triterpenoids and n-alkanes were the most frequent and abundant constituents found in the species from both habitats. The distribution of n-alkanes predominated by homologues with 27, 29, 31 and 33 carbon atoms, displayed no consistent differences between species from the two habitats. Lupeol, β-amyrin, epifriedelinol and ursolic acid were the triterpenoids found. Triterpenoids clearly predominate over alkanes in the waxes from the Cerrado species. The waxes of two evergreen species from the Caatinga yielded n-alkanes as predominant constituents. A comparison of foliar epicuticular waxes of native plants from ecosystems with different hydric constraints is discussed.