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TRICHOMES DENSITY INFLUENCE IN LEAF AREA CONSUMED OF *Tibouchina* Aubl. (MELASTOMATACEAE)

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Trichomes acts as physical barriers on plants surface to prevent phytophagous organisms damage. *Tibouchina* Aubl. (Melastomataceae) genus have 20 trichomes types that could be found in a single species. The purpose of this work was answer if: (i) leaf area consumed different between *Tibouchina* species that have differences in trichomes distribution? and (ii) does leaf area consumed in *Tibouchina* decreases as trichomes density increases? The samples were taken in APA Cachoeira das Andorinhas, in Ouro Preto city, Minas Gerais state. The region is characterized by Atlantic Forest domain and rupestrian fields outcrops. We select two species: *Tibouchina canescens* (D.Don) Cogn. with non-glandular, unbranched and unicellular trichomes in both leaves surface; and *Tibouchina martusiana* (DC.) Cogn. with non-glandular, branched and multicellular trichomes only in abaxial surface. Were sampled 10 individuals of each species. In each plant were collected four branches and 5 leaves from each branch. Leaf area consumed were measured using Sigma Scan software and trichomes density measures were taken in 1 mm² of each leaf using a stereomicroscope. Wilcoxon tests were performed to verify the differences between leaf area consumptions percentages. Spearman correlation was performed to relate trichomes density and leaf area consumed. There was no significant difference in leaf area consumptions between both *Tibouchina* species. However, there was a negative relation between consumed leaf area and trichomes density in abaxial surface of both species. The same pattern was found when trichomes density in adaxial surface and leaf area consumed in *T. canescens* were compared. Knowing that related phylogenetically species have more characteristics in common than compared with species of other family, we consider that this plants have similar insects diversity that consume their leaves. About trichomes effects, other works have related decreases in herbivory rates due to increase in trichomes density, evidencing their protection function on plants.

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