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Effect of morpho-physio chemical plant factors on preference of *lasioderma serricorne(f.)* (coleoptera: anobiidae) on four types of tobacco

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Flue-cured Virginia (FCV), Sun-cured Rustica (SCR), Dark Air-cured (DAC) and Air- cured Burley (ACB) were evaluated for preference by larvae and adults of *Lasioderma serricorne*. Leaf thickness (LT), moisture content (MC), nicotine, total sugars (TS), starch, chlorides and potassium contents were determined and the impact of these factors on preference was worked out. FCV tobacco was highly preferred by both larvae (2.18) and adults (1.49) due to high percentages of MC (12.50), TS (15.84) and starch (6.89). ACB was least preferred due to low contents of MC (11.40%), TS (1.29%) and starch (1.14%). Potassium had negatively significant effect on the beetle's preference. Regression analyses revealed a positive relationship of larvae and adults with MC (0.780, 0.803) TS (0.866, 0.713) and starch (0.888, 0.765) while negative relationship with potassium (-0.684, -0.407). LT (0.155, 0.101) nicotine (-0.047, -0.277) and chlorides (0.163, 0.305) had non-significant association with preference by both larvae and adults respectively. The relationship between MC, TS and starch is direct curvilinear as their increase had encouraged the population of *L. serricorne*.

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