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Assessment of Robusta coffee genotypes cultivated in the Brazilian Amazon

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Introduction and aiming: the 'Robusta' coffee is widely grown in the Brazilian Amazon, yet it is poorly studied in terms of crop breeding. This work aimed to assess different genotypes of *C. canephora* 'Robusta' cultivated in the Rondônia State, within the Brazilian Amazon region.

Methods: a total of 16 genotypes (AS2, B80, AS7, AS1, V06, SV41, A106, J08, J25, B015, AS6, AS4, Z156, AS10, J03, L140) were studied in 1.3 years-old coffee plants from a farm located in Alta Floresta D'Oeste, Rondônia, Brazil (12º08'51.86" S, 62º04'95.03" W). Assessments included: plant height, length of the plagiotropic branch, number of nodes, internodes distance and canopy diameter. The data were analyzed with the Skott-Knott test ($p<0.05$).

Figure 1: Evaluation of sixteen genotypes of robusta coffee, including length of plagiotropic branch (A) and plant height (B)

Results: the number of nodes was the assessment with most variance, whereas the B015 genotype showed the lowest mean value (8.81) and the J25 genotype the highest mean value (14.68). In relation to plant height, it was observed two distinct groups: one ranging from 82.53 to 96.92 cm and other from 74.39 to 86.22 cm

Conclusion/Perspectives: Initial assessments of the development of coffee plants within different genotypes are important to infer about the production capacity as well as the vegetative performance in future years. This pioneer study contributed to understand the morphological characteristics of the assessed coffee genotypes, which will be used as the basis for a future crop breeding program of Robusta coffee in the Brazilian Amazon region.

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