

## ACCESSIONS DIVERSITY OF YAM BEAN (*Pachyrhizus spp.*) VIA BIPLOT BASED ON MORPHO-AGRONOMIC TRAITS

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The Instituto Nacional de Pesquisas da Amazônia (INPA) has kept 64 yam bean accessions originating from Brazil and Mexico, for 30 years. However, their diversity is unknown. Yam bean is an edible root, yet, its seeds bear rotenone and pachyrhizin. We assessed them through 10 morpho-agronomic traits, plant height, secondary branches number, aerial phytomass, stalk diameter, root phytomass, number, length, diameter, length/diameter ratio, and shape. The accessions were planted on non-flooded land, Manaus (02° 59'48.2''S and 60° 01' 22.4''W) in completely randomized design with three replicates and three plants per plot. The results showed diversity for all characters except for stalk diameter. Biplot graphic accounted for 77% of the total variation, it revealed that secondary branches number, root diameter, length and yield diversity had high contribution to diversity. P18, P44 and P55 accessions were more divergent, but most accessions presented diversity. Therefore, we conclude there to be wide accessions diversity on what pertains to root yield and plant architecture. This indicates yam bean breeding program can be successful on the yield of roots and seeds in the Amazon region.

Keywords: Biodiversity; Feijão-macuco; Jacatupé; Multivariate analysis.

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