

Early Bearing Stage Evaluation of *Coffea arabica* L. Germplasm for Yield and Morphological Characters

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SUMMARY

The study conducted on coffee trees of Western Ethiopia with first two productions reveals that the morphological characters such as fruit length, canopy diameter, girth of the main stem, average length of the primary branch and average internode length of the main stem showed a higher estimate values of genetic component, heritability in broad sense as well as in genetic advance as percent of the mean at early stage of production. Hence these characters are worth to be considered as indirect selection criteria to conduct early selection, moreover, these traits have revealed a positive and significant association with average yield of the first two year production, which recorded lower heritability estimate in broad sense, at genotypic and phenotypic level. The path coefficient analysis at genotypic level further revealed the importance of main stem node and plant height for use as indirect selection for higher yield as reflected by the highest and positive direct effect values.