Screening of Arabica Coffee Collections for Bebeka Environment

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ABSTRACT

Two hundred eight coffees (*Coffea arabica* L.) collections of four groups were evaluated for yield and some growth characters. Considerable differences were observed between collections and between years in most groups. Year-by-collection interactions were also significant. Yield distributions were skewed to the higher classes in most groups. The average yield of the top selections from group I, II, III and IV were respectively 16.9, 5.0, 9.3 and 10.8 Qts of clean coffee/ha and all together 16 selections have been found yielding 10 to 19 Qts/ha. The genetic advances through selection were 0.9, 1.5, 2.2 and 2.1 Qts/ha while the broad sense inheritabilities were 19, 76, 50 and 45 percent for group I, II, III and IV, respectively.

The top selections exhibited good growth performance. The correlation between yield and the growth characters were highly significant. Furthermore, in this study, selection for a particular locality appeared to be more successful if the search is largely focused on collections from vicinities or other areas having similar environment to the area in question.