

Outturn of Tetraploid Arabusta Hybrids (*C. canephora* 4n x *Coffea arabica*)*

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*Supported by CBP & D-Café

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SUMMARY

The germplasm bank maintained as a living collection at the Instituto Agronômico de Campinas possess several fertile Arabusta hybrids that are being studied as to several aspects concerning its biology of reproduction. Such hybrids are more rustic and productive than *C. arabica* and have a cup quality superior to *C. canephora*. Arabustas might represent a crop option for regions with climatic aptitude for *C. canephora* but marginal to *C. arabica*. Among several characteristics, the outturn percentage coffee was studied in 39 different Arabustas, 89 lines of *C. canephora* and 18 of *C. arabica*, cultivated and processed under comparable conditions. Higher ratios were observed among *C. canephora* ($54 \pm 6,9\%$) as compared to *C. arabica* ($45 \pm 4,5\%$). The Arabustas displayed a much inferior ratio ($28 \pm 7,2\%$). A more detailed observation of the Arabusta fruits indicated that 67% were devoid of at least oneseed as they floated in water and the remaining yielded 47% of peaberry seeds. A test of 9 different *C. arabica* indicate that in fruits processing a peaberry the outturn is reduced 22% in average. Thus, both floaters and fruits with peaberry account for the low outturn of the Arabustas. However, the basic underlying reasoning should be traced back to its interspecific hybrid origin and to the additional fact that the parental *C. canephora* is a self incompatible species.