

Synchronization of Coffee Somatic Embryos using Abscissic Acid (ABA)

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SUMMARY

Breeding work at the Coffee Research Foundation Ruiru, Kenya has developed a new coffee Cultivar that is resistant to the two major diseases Coffee Berry Diseases (CBD) caused by *Collectotrichum kahawae* sp. Nov., and Coffee Leaf Rust (CLR) caused by *Hemilea vastatrix* B. et. Br. The propagation of the new cultivar is by hand cross-pollination, which is time consuming. Recently the Coffee Research station has developed a tissue culture protocol (somatic embryogenesis) for propagating the new variety. In somatic embryo system asynchrony development of embryos is evident. Of the various growth regulators tested for controlling precocious development of somatic embryos *in vitro*, ABA has been found to be the best. During the study, when globular embryos were subjected to ABA 1-10 μ M most of the embryos were found to be more mature (cotyledonary Stage).