

Quality Aspects in Arabica Coffee Breeding Programmes in Africa

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SUMMARY

An appraisal has been made of the results of arabica coffee breeding programmes carried out in five African countries – Kenya, Ethiopia, Tanzania, Uganda and Cameroon – with resistance to coffee berry disease as main objective, by looking at: (1) quality of breeding strategies and methodologies, (2) quality of the new disease resistant cultivars and (3) quality of technology transfer. The Kenyan programme appears to have scored remarkably well in the first two points, but the multiplication of the new disease resistant cultivar Ruiru II has remained below original targets notwithstanding the high level of farmers' acceptance. However, in other arabica coffee breeding programmes above mentioned quality aspects appear to have been realized in a less satisfactory manner. New cultivars resistant to CBD and CLR are either not yet available, or are not well adapted to local growing conditions, or do not meet the required standards of bean and liquor quality. Recent advances in conventional and molecular genetics offer considerable opportunities also for arabica coffee breeders to increase selection efficiency and so develop disease resistant cultivars which should improve the socio-economic situation of millions of smallholder coffee growers and secure also a stable position in the top-quality segment of the world coffee market for their countries. Work in isolation is usually detrimental to research output and may have been one of the underlying causes of slow progress in some arabica coffee breeding programmes. Just as in other crops, such programmes would benefit greatly from effective networking between arabica coffee breeders at regional and international levels.