Project Updates: July 2014

Theme: Final data from fruit formation, fruit removal and seed predation experiments

We conducted field work separately in May and June 2014 to collect data from the previously installed experiments. The experiments were aimed to quantify patterns of fruit development across the four sites as well as the rate of removal and or damage of mature *C. kihansiensis* cherries by birds and invertebrates in the Kihansi gorge forest. In May 2014, a third seed predation trial experiment was conducted to gather information on any possible seasonal influences on predation of coffee seeds in the area. During this period, data were also collated from seed formation and fruit removal experiments installed in November 2013 April 2014 respectively. The June 2014 fieldwork involved two activities. First, collating final data from fruit formation and fruit removal experiments and secondly, collecting coffee cherries from seed traps and harvesting ripe fruits (Fig 1) for subsequent germination experiments. Harvested fruits were measured fruit mass (gm) and size (length and width). The above experiments have now ended.



Fig 1. C.kihansiensis berries (A) harvested from coffee stems and naturally dispersed seeds (B) collected from seed traps in the Kihansi gorge forest (photographs by Alfan Rija).

What are the next activities: First, we have now started pre-treating the harvested fruits by sun drying them and we expect to set up some trial germination experiments at start of a third week of July 2014. The experiments will be conducted both from Kihansi forest and from the laboratory at Sokoine University of Agriculture. Germination experiments will be monitored until the seeds germinate to understand the ability of this species to recruit into seedlings. Second, we have commenced data analyses and writing up of project report for the completed experiments.

Acknowledgements: We are highly indebted to the continued support by the Rufford Small Grant Foundation in generating these valuable data that will help address conservation challenges facing *Coffea kihansiensis* in this threatened ecosystem.