Project Update: July 2007

The second phase of this work compared the ecological relevance of the three most common fuel-wood plant species found during market survey (*Parkia biglobosa, Syzygium guineense guineense, Terminalia macroptera*), with the exotic *Eucalyptus camaldulensis*. Results are tabulated in the tables below:

Table 1: Estimates of abundance, richness and diversity of bird species across fuel-wood plant species and *Eucalyptus camaldulensis*

Plant species	Mean avian	Avian species	Simpson's
	visitation/plant/half	richness	diversity index
	hour		
	(<u>+</u> S.D.)		
Parkia biglobosa	2.00 <u>+</u> 0.391	14	10.00
Syzygium guineense	1.00 <u>+</u> 0.486	8	6.25
guineense			
Terminalia macroptera	0.75 <u>+</u> 0.509	9	11.11
Eucalyptus camaldulensis	0.80 <u>+</u> 0.507	6	4.76

Most insect families occurred on Syzygium guineense guineense (Table 2)

Table 2: Estimates of abundance, richness and diversity of insect species across fuel-wood plant species and *Eucalyptus camaldulensis*

Plant species	Mean insect	Number of	Simpson's
	abundance/branch	insect families	diversity index
	(<u>+</u> S.D.)		
Parkia biglobosa	10.78 <u>+</u> 4.85	18	1.92
Syzygium guineense	4.18 <u>+</u> 1.78	26	12.50
guineense			
Terminalia macroptera	3.00 <u>+</u> 0.74	23	4.17
Eucalyptus camaldulensis	0.53 <u>+</u> 1.08	7	0.40

Bird nest (village weaver, *Ploceus cucullatus*) and mammal records (Tantalus monkey, *Chlorocebus tantalus*) were only observed once and only on *Parkia biglobosa*.



Left: Parkia biglobosa during its non-flowering stage. Right: Surveying birds and mammals utilising study plant species.