TABLE 1 - Main parameters of vegetation cover within a quarter section of a 5 m radius circle of study mounds targeted by chimpanzees for termite fishing (abundance of plants suitable to provide raw material for termite fishing probes; identified individual tool source plants and sourced parts within the source plant; recovered tools that were abandoned by chimpanzees at the targeted mound).

	Plants (n)							Near targeted termite mound		
Termite mound	Total within quadrant	Suitable to extract raw material[a]	Potential sources of bark	Potential sources of twig	Potential sources of leaf stalk	Potential sources of grass	Plants of known tool sources species (n)	Individ-ual tool source plants (n)	Sourced plant parts (n)	Recove-red tools (n)
ITM004	39	39	6	38	4	0	1	15	45	21
ITM006	42	42	3	41	16	0	2	26	80	46
ITM007	74	4	0	4	0	0	0	1	14	21
ITM008	74	28	15	28	0	0	0	7	14	9
ITM009	45	28	7	17	1	6	6	22	50	3
ITM013	25	24	4	20	0	0	4	25	97	19
ITM015	25	25	5	25	11	0	1	12	36	6
ITM016	74	74	8	74	0	0	17	5	13	15
Sum	398	264	48	247	32	6	31	113	349	140
Mean	49.8	33.0	6.0	30.9	4.0	0.8	3.88	14.1	43.6	17.5
% relative to total plants	100.0	66.3								
% relative to plants suitable as raw material sources			18.2	93.6	12.1	2.3	11.7			

[a] Note that the same plant may provide more than one type of raw material

TABLE 2 - Main classes of raw material sourced by chimpanzees to manufacture termite fishing probes relative to the average abundance of potential raw material sources near studied termite mounds.

	Raw material source				
	Bark	Twig	Leaf stalk	Grass	Total
Tools sourced (n)	140	0	0	0	140
Parts sourced (n)	349	0	0	0	349
Abundance of suitable raw material (mean of study mounds)	6.00	30.88	4.00	0.75	49.75

TABLE 3 - Percentage of plants sourced per species relative to the species' general abundance for each mound. TS = total sourced plants; AB = abundance.

			ITM004		ITM006		ITM007		ITM008		ITM009		ITM013		ITM015		ITM016	
Family	Species	Type [b]	TS (%)	AB (%)	TS (%)	AB (%)	TS (%)	AB (%)	TS (%)	AB (%)	TS (%)	AB (%)	TS (%)	AB (%)	TS (%)	AB (%)	TS (%)	AB (%)
Annonaceae	*Annona senegalensis*	T											4					
	Artabotrys collinus	C	7		27				57	2	73	4	36	4	67	6	40	1
	Artabotrys monteiroae	C			8						9		4		25	4		
	Uvaria angolensis	C	7		4				14	3	5	4	12					
	Uvaria sp. A of FTEA	C	20	3	23	1			14				40		8	7		
	Uvaria welwetschii	C											4					
	Monanthotaxis buchananii [a]	S																
Apocynaceae	*Saba comorensis*	C							14	3								
Euphorbiaceae	*Cleistanthus polystachyus*	T	67		35													
Malvaceae	*Azanza garckeana*	T															40	4
	Dombeya burgessiae	T					100											
Tiliaceae	*Grewia sp.*	C			4												20	1
Rubiaceae	*Rothmannia urcelliformis* [a]	T																
	Non-Sourced			97		99		100		92		92		96		83		94
	Total Plants (n)		15	39	26	42	1	74	7	74	22	45	25	25	12	25	5	74

[a] Excluded from quantitative analysis as identified at two mounds that were not part of raw material availability studies
[b] T = tree, C = climber, S = shrub

TABLE 4 - Plant species exploited by chimpanzees as sources for termite fishing tools and their main physical properties (diameter of sourced and unsourced parts of tool source species at point of detachment; height of sourced branch; total height of sourced plant).

		Diameter of sourced plant parts at point of detachment				Diameter of unsourced plant parts				Height of sourced plant parts at point of detachment (a)				Height of sourced plant			
Species	Type [b]	Mean (mm)	Min (mm)	Max (mm)	(n)	Mean (mm)	Min (mm)	Max (mm)	(n)	Mean (mm)	Min (m)	Max (m)	(n)	Mean (mm)	Min (m)	Max (m)	(n)
Annona senegalensis	T	5.1			1	8.5	3.3	2.7	6	1.1			1	2.2			1
Artabotrys collinus	C	7.0	2.6	19.9	137	8.9	1.6	69.9	88	1.0	0.0	3.5	145	2.6	0.8	2.3	47
Artabotrys monteiroae	C	6.6	4.2	12.7	18	7.3	2.0	30.9	32	0.9	0.4	1.8	19	2.5	1.7	2.1	8
Azanza garckeana	T	7.7	5.0	13.3	11	4.5	2.1	12.4	16	0.6	0.0	1.8	11	1.7	0.6	3.0	7
Cleistanthus polystachyus	T	6.9	2.8	20.5	78	8.0	1.8	29.3	56	1.0	0.0	2.6	78	2.1	0.9	4.0	24
Dombeya burgessiae	T	5.6	3.6	8.6	6					2.0	1.5	2.3	6	8.0			1
Grewia sp.	C	9.6			1									4.0			1
Saba comorensis	C	8.5	2.5	16.5	60	7.2	1.9	44.8	58	1.6	0.4	3.8	62	3.5	1.7	3.5	19
Uvaria angolensis	C	9.8	5.5	13.1	3	17.8	11.3	30.6	3	1.2	0.8	1.5	5	4.5	4.0	4.5	2
Uvaria sp. A of FTEA	C	10.0	4.1	19.0	11					1.4	0.3	2.3	14	2.0			1
Uvaria welwetschii	C	19.5	10.7	26.5	5	15.1	10.1	22.9	3	0.8	0.4	1.2	7	4.0	3.0	5.0	2
All species		8.7				9.7				1.2				3.4			

[a] For species with more than one sourced part
[b] T = tree, C = climber

TABLE 5 – Visibility of individual sourced plants from targeted mounds and sourced parts used to manufacture tools.

	Distance of source plants from targeted mound			Visible from targeted mound?		
	All plants	<10m	≥10m	Yes (all plants)	No (all plants)	No (plants sourced from ≥10m)
Plants (n)	113	71	42	89 (78.8 %)	24 (21.2%)	23 (54.8%)
Parts sourced (n)	349	266	83	311	38	37
Parts sourced per plant (n)	3.1	3.7	2.0	3.5	1.6	1.6

TABLE 6 – Tool source species that chimpanzees also exploit as food sources.

Species	Plant parts eaten by chimpanzees [a]	Eaten at Issa? [b]	Eaten elsewhere? [b]
Annona senegalensis	F, L, B	Yes (1)	Yes (3, 4)
Artabotrys collinus	F	Yes (2)	
Artabotrys monteiroae	F	Yes (2)	Yes (3)
Uvaria angolensis	F, L	Yes (1)	Yes (3, 4)
Uvaria sp. A of FTEA	F	Yes (6)	Yes (4)
Uvaria welwetschii	F		Yes (4)
Monanthotaxis buchananii	U	U	U
Saba comorensis	F, L	Yes (1)	Yes (4)
Cleistanthus polystachyus	F, W		Yes (5)
Azanza garckeana	F, Bl	Yes (2)	Yes (3)
Dombeya burgessiae	N		Yes (6)
Grewia sp.	F, L, Bl	Yes (1)	Yes (3)
Rothmannia urcelliformis	F		Yes (7)

[a] F = fruit, L = leaves, B = bark, W = wood, Bl = blossom, U = unknown

[b] Sources: 1 = Piel et al. unpublished; 2 = local field assistant; 3 = Nishida and Uehara, 1983; 4 = Moscovice et al., 2007; 5 = Reynolds, 2005; 6 = Russak, 2013; 7 = Wrangham, n.d.

TABLE 7 – Medicinal properties of chimpanzee plant tool sources.

Species	Medicinal properties (B = bark, L = leaves, R = roots, S = sap)	Reference
Annona senegalensis	Dermatosis (R, L), digestive and stomach disorders (R, B, L, F), intestinal worms (B), chest colds (R), toothache (B), respiratory infections (L), antidote for snake and scorpion venom (B, R), convulsions (L), fever (L), malaria (B), infertility (R), venereal diseases (R), seal and treat cuts and wounds (B, L, S)	Ruffo et al., 2002; Arbonnier, 2004; Huffman, 2015; Mustapha, 2013
Artabotrys collinus	Stomach disorders (R), antidote for snakebite (R)	Ruffo et al., 2002
Artabotrys monteiroae	Back aches (R), digestive and stomach disorders (R), malaria (R, B)	Tan and Wiart, 2014
Azanza garckeana	Digestive and stomach disorders (S, R), menstrual pains (R), fertility (R), urinary retention (R), venereal diseases (R), chest pain (R), ear pain (R, L), coughs (R), ulcers (R)	SEPASAL [a]
Dombeyia burgessiae	Aphrodisiac (B), stomach pain (B), leprosy sores (L)	Bosch, 2011
Grewia sp.	Anemia (R), chest pains and colds (R), digestive and stomach disorders (R, L), constipation in domestic animals (L), female infertility (R), treatment of wounds (B, R), menstrual problems (R), pregnancy pains (R), snake bites (R)	Huffman, 2015; Ruffo et al., 2002
Rothmannia urcelliformis	Antidote to poisoning (R)	Neuwinger, 1996
Saba comorensis	Digestive and stomach disorders (R), vermifuge (R), jaundice (R), hepatitis (R), gonorrhoea (R), snake bites (R), aphrodisiac (R), splenosis (R), galactagogue for humans and cattle (S), abcesses (S), night blindness (S), hypertension (L), rheumatism and female infertility (B, R), applied on sores (S)	Ruffo et al., 2002; Arbonnier, 2004; SEPASAL
Uvaria angolensis	Antimicrobial and cytotoxic properties (B, R)	Hufford and Oguntimein, 1982
Uvaria welwetschii	Stomach disorders (R)	Moriyasu et al., 2011

[a] SEAPASAL = online database of plants of arid and semi-arid lands developed by The Royal Botanical Gardens, Kew (1996)