

Caterpillars consumed in Masi-Manimba territory (Kwilu), Democratic Republic of the Congo

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Table S1. Caterpillars consumed in Masi-Manimba territory.

Family	% Family	Genus	% Genus	Species	Fq. citati on (%) ¹	Ava ilab ility	Vernacular names			
							Mbala	Ngongo	Suku	Yansi
Erebidae	6	<i>Achaea</i> (Hübner, 1823)	3	<i>Achaea catocaloides</i> (Guinée, 1852)	97	+++	Mimbimbi	Mimbim	Mingingi	Mimbiem
				Not identified	88	+++	Magulupeta ; Mimvuta	Makwapeta ; Mawakasa ; Mimbim misek	Mawalakasa ; Mingota	Bemvir ; Mimpiere
		Not identified	3	Not identified	71	+++	Mimbimbi	Mimbim	Mingingi miemushitu	Mimbiem
				Not identified	56	++	Mipepi	Bitom	-	Mintomb ; Bentomb
Geometridae	2	<i>Aletis</i> (Hübner, 1820)	2	Not identified	56	-	Angayi	Bangayi	Bitalatangwa	Muntakoni ; Mitangway
Hesperidae	3	<i>Coeliades</i> Hübner 1818	2	<i>Coeliades libeon</i> (Druce, 1875)	80	+++	Dunzengeledi	Mikkak ; Minzengelele	Bimwangu	Minzeng ; Mikak ; Mikaw ; Milie
		<i>Platylesches</i> (Holland, 1896)	2	<i>Platylesches moritili</i> (Wallengren, 1857)	52	-	Magia ; Makia	Bitshia ; Bikiakia	-	Minkia ; Mikia
Lymantriidae	2	Not identified	2	Not identified	37	++	Mipepi	Mibanggang ; Mibanbang	Mibangbang	-
Noctuidae	3	<i>Aegocera</i> (Latreille, 1809)	2	<i>Aegocera rectilinea</i> (Boisduval, 1836)	58	++	Dugombila	Minzunuzuk ; Bigomwang ; Mikowang	Mikombodila ; Dinama	Mporambwa ; Mporambwa
		<i>Nyodes</i> (Laporte, 1970)	2	<i>Nyodes vitanvali</i> (Laporte, 1970)	65	++	Dusamba	Migigoth	Bitekwaterkwa	Minkiong ; Minswe ; Mikwer
Notodontidae	19	<i>Anaphe</i> Walker 1855	2	<i>Anaphe panda</i> (Boisduval 1847)	97	-	Mafugungu	Ma(Mi)fugung ; Misiseng	Mifugungu ; Mi(Bi)fukwanga ; Matesha	Mifung ; Mifuu
		<i>Elaphrodes</i> (Bethume-Baker, 1909)	2	<i>Elaphrodes lactea</i> (Gaede, 1932)	98	-	Mikogu	Mokok	Mikoko	Minkong
		<i>Epidonta</i> (Bethume-Baker, 1911)	8	<i>Epidonta brunneomixta</i> (Mabille, 1879)	97	+++	Mindanda	Mindanda	Mindanda	Mindaan
				Not identified 1.	92	+++	Angilu	Mingilu ; Ngil	Ngilu	Ngil
				Not identified 2.	85	-	Igegi	Bikek ; Bigeg	Bikeki	Bekek
				Not identified 3.	89	++	Mimbishifulu	Mimbishifulu ; Mimbisiful	Mingisifulu	Mimbakob ; Misir ; Mimbishifulu
		Not identified 4.	71	-	Mimboti	Mingutu	Muzusu	Mimiaymiay ; Mimeyameya		
		<i>Haplozana</i> (Aurivillius, 1901)	2	<i>Haplozana nigrolineata</i> (Aurivillius, 1901)	83	+++	Mikusula	Mikusula	Mikuswala	Mikusula
		<i>Phalera</i> (Hübner, 1819)	2	Not identified	65	++	Dusamba	Migigoth	Bitekwaterkwa miemushidu	Minkiong ; Minswe ; Mikwer
		Not identified	5	Not identified	63	++	Dumbala ; Dunzungungu	Minzunuzuk	Bikukwala	Minzok ; Minter
Not identified	29			-	-	Mimbim	-	-		
Not identified	14			-	Mipepepe	-	-	-		
Nymphalidae	2	<i>Cymothoe</i> (Hübner, 1819)	2	<i>Cymothoe caenis</i> (Drury, 1773)	100	+++	Mibamba	Mibamb	Mibamba	Mibaam
Pieridae	2	<i>Catopsilia</i> (Hübner, 1819)	2	<i>Catopsilia florella</i> (Fabricius, 1775)	24	-	Mingongulumbwa	Mingonapik ; Mingongolambwa	Mabandi ; Matsambitsambi	-

Family	% Family	Genus	% Genus	Species	Fq. citation (%)	Availability	Vernacular names			
							Mbala	Ngongo	Suku	Yansi
Psychidae	3	<i>Eumeta</i> (Walker, 1855)	3	<i>Eumeta cervina</i> (Druce, 1887)	67	++	Ikutupaga	Bipak	Kitok	Kimpiaw
				Not identified	35	-	Ikutupaga	Bipak	Kitok	Kimpiaw
Saturniidae	40	<i>Aurivillius</i> (Packard, 1902)	2	<i>Aurivillius triramis</i> (Rothschild, 1907)	66	++	Gombu di kipela	Makom	Kombu	Mankom ; Mpwokab ; Nkukab
		<i>Bunaea</i> (Hübner, 1819)	2	<i>Bunaea alcinoe</i> (Stoll, 1780)	89	++	Mahambi ; Mapambi	Mikiekubol	-	Mikiakabol ; Mikiebol ; Minkiebol
		<i>Bunaeopsis</i> (Bouvier, 1927)	2	<i>Bunaeopsis aurantiaca</i> (Rothschild, 1895)	55	-	Malengile ngi ; Malengale nga	Mileleng	Bikalugreen	Milé ; Milee
		<i>Cirina</i> (Walker, 1855)	2	<i>Cirina forda</i> (Westwood, 1849)	100	+++	Angolu ; Mangolu	Mingol	Tshata ; Mahungu ; Mingolo	Mingwel
		<i>Epiphora</i> (Wallengren, 1860)	3	<i>Epiphora ploetzi</i> (Weymer, 1880)	53	++	Minganga	Mingang	Misumbiala	Mingang ; Misel
				<i>Epiphora vacuna</i> (Westwood, 1849)	57	++	Minganga	Mingang	Misumbiala	Mingang
		<i>Gonimbrasia</i> (Butler, 1878)	6	<i>Gonimbrasia anthinoides</i> (Rougeot, 1978)	74	++	-	-	Mitundulu	Mituun
				<i>Gonimbrasia petiveri</i> (Guérin-Ménéville, 1845)	86	++	Matubula	Matuben	Misumbiala	Miyil ; Miyilyil
				<i>Gonimbrasia rhodophila</i> (Walker, 1869)	53	-	-	-	Misolu	-
				Not identified	74	++	-	-	Mitundulu mienushidu	Mituun
		<i>Imbrasia</i> (Hübner, 1819)	11	<i>Imbrasia epimethea</i> (Drury, 1773)	100	+++	Misa	Misa	Misati	Misa
				<i>Imbrasia ertli</i> (Rebel, 1904)	47	+++	Mafumbi	Mafumbi ; Misa masek	Mambanda	Misa manshok
				<i>Imbrasia obscura</i> (Butler, 1878)	100	+++	Makangu	Makang	Bikalugreen	Miway ; Miwey
				Not identified 1.	59	++	Makangu	Mikiel	Bikalugreen	Minkie
				Not identified 2.	79	++	Mambambi	Makakang ; Makikang	Matakanga	Misa minkaa
				Not identified 3.	70	+++	Masongolo	Mitshong ; Mitshong	Mitshong ; Mitshongts hong	Minswo ; Miwur ; Misongol
		Not identified 4.	49	++	Misa	Misa	Misati	Mimiolor		
		<i>Lobobunaea</i> (Packard, 1901)	6	<i>Lobobunaea acetes</i> (Westwood, 1849)	67	++	Gombu di kipela	Makom	Kombu	Mankom ; Mpwokab ; Nkukab
<i>Lobobunaea phaedusa</i> (Drury, 1782)	67			++	Gombu di kipela	Makom	Kombu	Mankom ; Mpwokab ; Nkukab		
<i>Lobobunaea rosea</i> (Sonthonnax, 1901)	60			++	Gombu	Makom	Kombu	Mankom ; Mpwokab ; Nkukab		
Not identified	66			++	Gombu di kipela	Makom	Kombu	Mankom ; MInzwom		
<i>Micragone</i> (Walker, 1855)	2	Not identified	60	+++	Masombu ; Ibulamigushi	Mafumbi ; Misa masek	-	Mitufeth ; Misanshok		
<i>Nudaurelia</i> (Rothschild, 1895)	2	<i>Nudaurelia rectilineata</i> (Sonthonnax, 1899)	64	++	Malengile ngi ; Malengale nga	Milileng	Bikalugreen	Milé ; Milee		
<i>Pseudobunaea</i> (Bouvier, 1927)	2	<i>Pseudobunaea pallens</i> (Sonthonnax, 1899)	67	++	Gombu di kipela	Makom	Kombu	Mankom ; Mpwokab ; Nkukab		
<i>Pseudimbrasia</i> (Rougeot, 1962)	2	<i>Pseudimbrasia devrollei</i> (Thompson, 1858)	67	++	Gombu di kipela	Makom	Kombu	Mankom ; Mpwokab ; Nkukab		

Family	% Family	Genus	% Genus	Species	Fq.citation (%)	Availability	Vernacular names			
							Mbala	Ngongo	Suku	Yansi
Sphingidae	19	<i>Acherontia</i> (Laspeyres, 1809)	2	<i>Acherontia atropos</i> (Linnaeus, 1758) green facies	59	++	Gidishi ; Igishi	Bidiss	Mitshiona	Kesayong
		<i>Agrius</i> (Hübner, 1819)	2	<i>Agrius convolvuli</i> (Linnaeus, 1758)	58	++	Gidishi ; Igishi	Bidiss	Mitshiona	Kesayong ; Kidiyong
		<i>Daphnis</i> (Hübner, 1819)	3	<i>Daphnis nerii</i> (Linnaeus, 1758)	58	++	Gidishi ; Igishi	Bidiss	Mitshiona	Kesayong ; Kidiyong
				Not identified	52	++	Gidishi ; Igishi	Bidiss	Mitshiona	Kesayong ; Kidiyong
		<i>Hippotion</i> (Hübner, 1819)	3	<i>Hippotion celerio</i> (Linnaeus, 1758)	59	++	Gidishi ; Igishi	Bidiss	Mitshiona	Kesayong ; Kidiyong
				<i>Hippotion osiris</i> (Dalman, 1823)	58	++	Gidishi ; Igishi	Bidiss	Mitwakim banda	Kesayong ; Kidiyong
		<i>Hypaedalea</i> (Butler, 1877)	2	<i>Hypaedalea ? butleri</i> (Rothschild, 1894)	37	++	Gidishi ; Igishi	Bidiss	Mitwakim banda	Kesayong ; Kidiyong
		<i>Lophostethus</i> (Butler, 1856)	2	<i>Lophostethus dumolini</i> (Angas, 1849)	59	++	Minganga	Minganga	Misumbial a	Minganga
		<i>Platysphinx</i> (Rothschild and Jordan, 1903)	2	<i>Platysphinx stigmatica</i> (Mabille, 1877)	61	++	Gidishi ; Igishi green	Bidiss	Mitshiona	Kesayong ; Kidiyong
		Not identified	5	Not identified	48	++	Gidishi ; Igishi green	Bidiss	Mitshiona	Minsoyi ; Minsweyi
Not identified	63			++	Gidishi ; Igishi	Bidiss	Mitshiona	Kesayong		
Not identified	52			++	Gidishi ; Igishi	Bidiss	Mitshiona	Kesayong		

¹ Frequency of citation by all respondents ; +++ : available ; ++ : rare ; - : disappeared. The frequencies of each family and genus were calculated in relation to the total number of scientifically confirmed caterpillars (63).



Figure S1. Images of some edible caterpillars from Masi-Manimba: (A) *Erebidae* sp.1 ; (B) Ventral side of *Erebidae* sp.1 ; (C) *Aletis* sp. ; (D) *Cymothoe caenis* (Drury, 1773) ; (E) *Aegocera rectilinea* (Boisduval, 1836) ; (F) *Lophostethus dumolini* (Angas, 1849) ; (G) and (H) *Lymantriidae* sp. ; (I) *Haplozana nigrolineata* (Aurivilius, 1901 ; (J) *Notodontidae* sp.1 ; (K) ventral side of *Notodontidae* sp.1 ; (L) *Notodontidae* sp.2 ; (M) *Anaphe panda* (Boisduval, 1847) ; (N) ventral side of *A. panda* ; (O) *Phalera* sp.



Figure S2. Images of some edible caterpillars from Masi-Manimba: (A) *Elaphrodes lactea* (Gaede, 1932); (B) *Epidonta brunneomixta* (Mabille, 1879); (C) *Epidonta* sp.1; (D) *Epidonta* sp.2; (E) *Epidonta* sp.3; (F) *Eumeta* sp.; (G) Notodontidae sp.1; (H) Ventral side of Notodontidae sp.1; (I) Erebidae sp.; (J) *Catopsilia florella* (Fabricius, 1775); (K) *Eumeta cervina* (Druce, 1887); (L) Cocoon of *E. cervina*; (M) *Nyodes vitanvali* (Laporte, 1970); (N) and (O) Sphingidae sp.

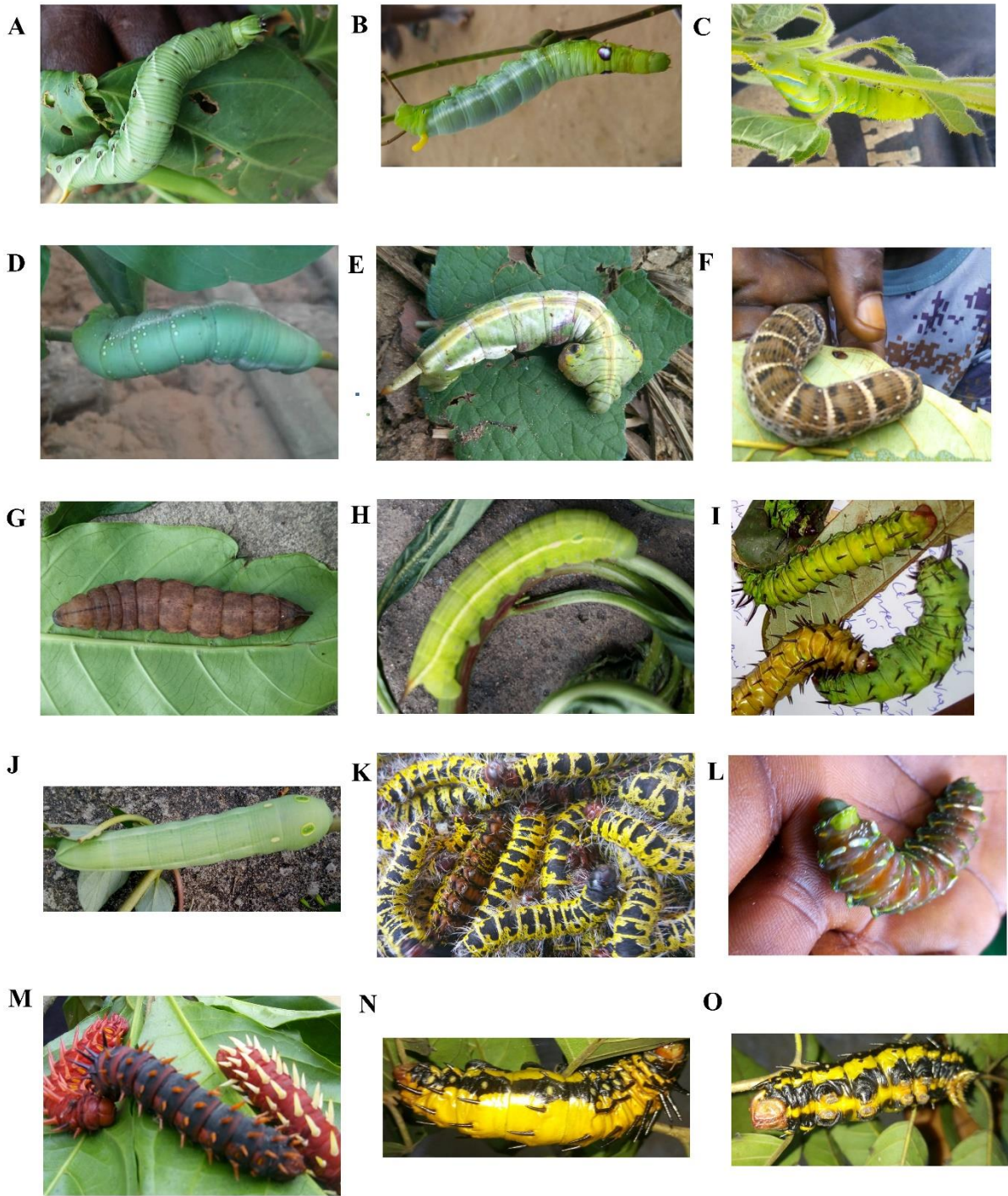


Figure S3. Images of some edible caterpillars from Masi-Manimba: (A) *Agrius convolvuli* (Linnaeus, 1758); (B) and (C) *Acherontia atropos* (Linnaeus, 1758); (D) Sphingidae sp.; (E) *Hypaedalea ? butleri* (Rothschild, 1894); (F) *Hippotion osiris* (Dalman, 1823); (G) Sphingidae sp.2; (H) and (J) *Hippotion celerio* (Linnaeus, 1758); (I) *Epiphora vacuna* (Westwood, 1849); (K) *Cirina forda* (Westwood, 1849); (L) *Aurivillius triramis* (Rothschild, 1907; (M) *Bunaea alcinoe* (Stoll, 1780; (N) and (O) *Epiphora ploetzi* (Weymer, 1880).



Figure S4. Images of some edible caterpillars from Masi-Manimba: (A) *Imbrasia obscura* (Butler, 1878); (B) and (C) *Lobobunaea rosea* (Sonthonnax, 1901); (D) *Pseudobunaea pallens* (Sonthonnax, 1899) ; (E) *Lobobunaea phaedusa* (Drury, 1782); (F) *Micragone* sp.; (G), (H) and (I) *Nudaurelia rectilineata* (Sonthonnax, 1899); (J), (K) and (L) *Imbrasia ertli* (Rebel, 1904) ; (M) *Imbrasia epimethea* (Drury, 1773); (N) *Gonimbrasia anthinoides* (Rougeot, 1978) ; (O) *Gonimbrasia petiveri* (Guérin-Méneville, 1845).

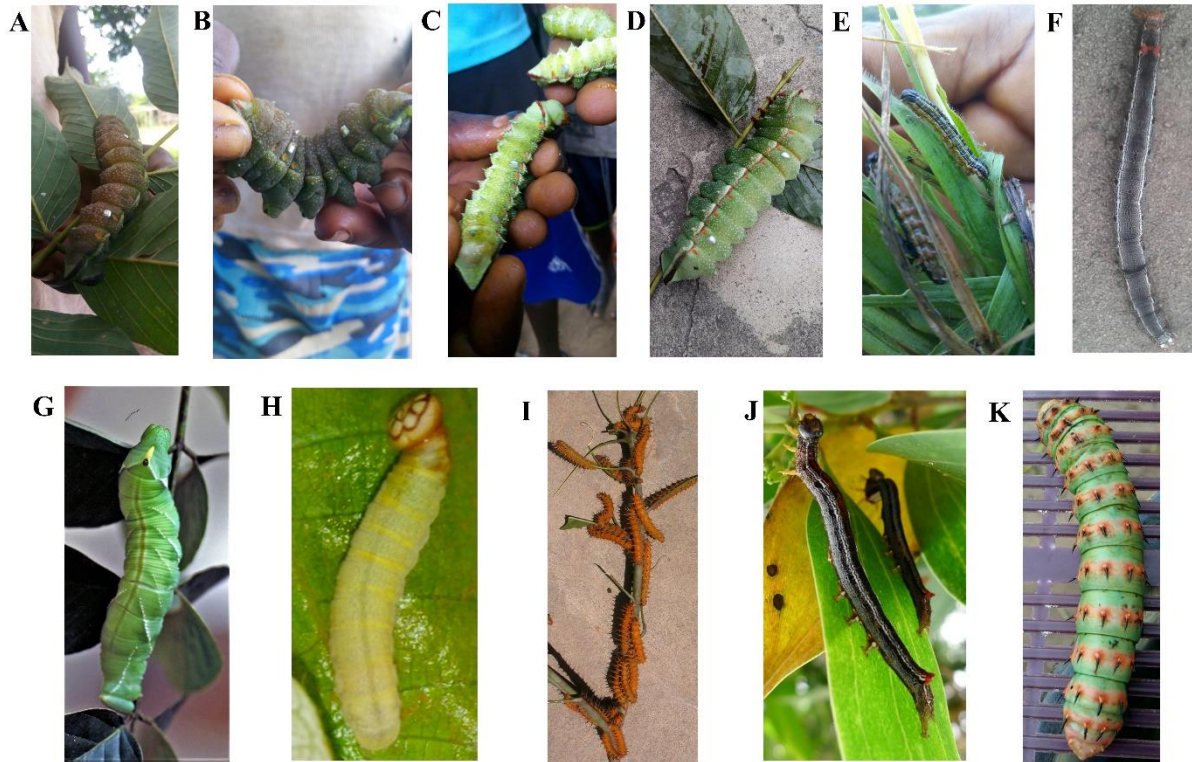


Figure S5. Images of some edible caterpillars from Masi-Manimba: (A) and (B) *Lobobunaea acetes* (Westwood, 1849) ; (C) and (D) *Lobobunaea* sp.; (E) *Coeliades libeon* (Druce, 1875) ; *Achaea* sp.; (F) *Micragone* sp.; (G) *Platysphinx stigmatica* (Mabille, 1877); (H) *Platylesches moritili* (Wallengren, 1857); (I) *Gonimbrasia rhodophila* (Walker, 1869); (J) *Achaea catocaloides* (Guinée, 1852); (K) *Bunaeopsis aurantiaca* (Rothschild, 1895).

ANNEX S SURVEY QUESTIONNAIRE / KWILU

No. card.....

Name of investigator:

Date.....

Place.....

A. Demographic information

Name of respondent.....

Sex: M W

Age: 15- 20 years 21- 30 years 31- 40 years 41- 50 years > 50 years

Education: Primary Secondary Humanities University Other Profession:
.....

B. Main part

1. How long have you been collecting edible caterpillars?

A. 0 to 10 years B. 11 to 20 years C. 21 to 30 years D. > 30 years

2. Complete this table on the caterpillars that are currently being harvested by giving the vernacular names of each caterpillar and its host plant(s) in your language (please specify) and if possible, in another related language.

N°	Names of the caterpillars collected		Names of their host plants	
	Ethnicity of origin	Neighboring ethnicity	Ethnicity of origin	Neighboring ethnicity

3. Indicate for each of the species mentioned, the habitat (Primary forest - "mbalaka", Secondary Forest, savannah), month(s) of collection, duration of collection, quantity collected per day (number of yellow ekolos = 1 kg), method(s) of collection (manual collection, tree felling, branch pruning, other to be specified), the proportion of sales (25%, 50%, 75%, 100%) and the price per sales unit.

Caterpillar number	Habitat	Month/pick up	Duration/collection	Quantity harvested	Fashion/picking	ratio / sale	Price/sale

4. What species of caterpillars do you currently harvest but did not exist in your area in the past?

Answers/.....
.....

And this for how many years already:

A. < 1 year (current year) B. 1 to 3 years C. 4 to 6 years D. 7 to 10 years

5. Give the local names (in your language and if possible, in another language to be specified) of the caterpillars that have disappeared in your area, as well as those of their host plants.

N°	Names of the missing caterpillars		Names of their host plants	
	Ethnicity of origin	Neighboring ethnicity	Ethnicity of origin	Neighboring ethnicity

6. For each of the disappeared caterpillars (according to their number), indicate the habitat, the month of collection, the method of collection, the period when you noticed the disappearance, the probable causes of disappearance (felling of trees, deforestation, non-respect of customary rules) and the taste value (very good, good, fairly good).

Caterpillar number	Habitat	Month/pickup	Fashion/ picking	Report of disappearance	Probable causes of disappearance	Gustatory value

NB: For the collection of samples, please always collect about 500 g of fresh caterpillars and 500 g of its feeder leaves from the same place. The same caterpillar species should be collected from three different villages (or locations) if possible (*i.e.*, three replicates to make 1.5 kg of each material). Never mix them. For caterpillars, weigh them, clean them and put them in the freezer if possible; if not, dry them (as well as the leaves), always separated according to the samples, under cover at a maximum temperature of 40 °C.

Thank you very much