

Supplementary material to:

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Diversity of insect pests of common bean and pigeon pea in the Republic of Congo revealed by DNA barcoding

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Table S1. List of insect samples with information about crops (CB: common bean and PP: pigeon pea), type of sampling (Su: survey of storage sites and St: experimental storage of seeds collected in farmer plots), prefecture, subprefecture, locality in the Republic of Congo, site/plot, latitude, longitude, sampling date, sample code, identification, COI haplotype number (hap) and COI Accession Number (AN).

Crop	Sampling	Prefecture	Sub-prefecture	Locality	Site/Plot	Latitude	Longitude	Date	Sample code	Identification	hap	COI AN
CB	Su	Bouenza	Boko Songho	Bandamamba	PB25	S 04°27'52.1"	E 013°36'29.1"	01-05-19	PB25-2BR	<i>Acanthoscelides obtectus</i>	NA	ON808567
CB	Su	Bouenza	Boko Songho	Kalamboutoto	PB22	S 04°25'60.2"	E 013°39'56.8"	01-05-19	PB22-1	<i>Acanthoscelides obtectus</i>	NA	ON808590
CB	Su	Bouenza	Boko Songho	Kalamboutoto	PB22	S 04°25'60.2"	E 013°39'56.8"	01-05-19	PB22-2	<i>Acanthoscelides obtectus</i>	NA	ON808573
CB	Su	Bouenza	Boko Songho	Kalamboutoto	PB22	S 04°25'60.2"	E 013°39'56.8"	01-05-19	PB22-3	<i>Acanthoscelides obtectus</i>	NA	ON808560
CB	Su	Bouenza	Boko Songho	Kalamboutoto	PB22	S 04°25'60.2"	E 013°39'56.8"	01-05-19	PB22-4	<i>Acanthoscelides obtectus</i>	NA	ON808561
CB	Su	Bouenza	Boko Songho	Kimbenzakola2	PB23	S 04°25'60.3"	E 013°39'57.0"	01-05-19	PB23-1	<i>Acanthoscelides obtectus</i>	NA	ON808579
CB	Su	Bouenza	Boko Songho	Yengue	PB24	S 04°24'84.9"	E 013°39'57.0"	01-05-19	PB24-1	<i>Acanthoscelides obtectus</i>	NA	ON808580
CB	Su	Bouenza	Boko Songho	Yengue	PB24	S 04°24'84.9"	E 013°39'57.0"	01-05-19	PB24-2	<i>Cadra cautella</i>	hap1	ON811001
CB	Su	Bouenza	Boko Songho	Yengue	PB24	S 04°24'84.9"	E 013°39'57.0"	01-05-19	PB24-3	<i>Cadra cautella</i>	hap1	ON811001
CB	Su	Bouenza	Loudima	Mikassou	PL19	S 04°11'41.0"	E 012°58'40.9"	30-04-19	PL19-1	<i>Acanthoscelides obtectus</i>	NA	ON808566
CB	Su	Lekoumou	Sibiti	Lissiémi	PS18	S 03°55'81.8"	E 013°09'71.2"	28-04-19	PS18-1	<i>Acanthoscelides obtectus</i>	NA	ON808576
CB	Su	Niari	Kimongo	Kikassa2	PK4	S 04°17'71.5"	E 012°46'42.9"	26-04-19	PK4-1f	<i>Acanthoscelides obtectus</i>	NA	ON808562
CB	Su	Niari	Kimongo	Kikassa2	PK4	S 04°17'71.5"	E 012°46'42.9"	26-04-19	PK4-2	<i>Acanthoscelides obtectus</i>	NA	ON808584
CB	Su	Niari	Kimongo	Mangakala	PK5	S 04°20'66.1"	E 012°48'68.9"	26-04-19	PK5-1	<i>Acanthoscelides obtectus</i>	NA	ON808578
CB	Su	Niari	Londela Kayes	Kindamba kiangou	PL13	S 04°51'04.6"	E 013°24'59.2"	28-04-19	PL13-1	<i>Acanthoscelides obtectus</i>	NA	ON808572
CB	Su	Niari	Londela Kayes	Kindou	PL11	S 04°50'76.1"	E 013°26'12.1"	28-04-19	PL11-1	<i>Acanthoscelides obtectus</i>	NA	ON808587
CB	Su	Niari	Londela Kayes	Kindou	PL11	S 04°50'76.1"	E 013°26'12.1"	28-04-19	PL11-2	<i>Acanthoscelides obtectus</i>	NA	ON808585
CB	Su	Niari	Londela Kayes	Kindou	PL11	S 04°50'76.1"	E 013°26'12.1"	28-04-19	PL11-3	<i>Acanthoscelides obtectus</i>	NA	ON808563
CB	Su	Niari	Londela Kayes	Mbiongo	PL10	S 04°50'37.0"	E 013°26'17.9"	28-04-19	PL10-1	<i>Acanthoscelides obtectus</i>	NA	ON808574
CB	Su	Plateaux	Lékana	Kebara	PL31	S 02°27'04.3"	E 014°24'89.2"	06-05-19	PL31-1	<i>Mussidia</i> sp.	hap1	ON811002
CB	Su	Plateaux	Lékana	Lague	PL29	S 02°43'36.3"	E 014°10'74.0"	06-05-19	PL29-2	<i>Mussidia</i> sp.	hap2	ON811003
CB	Su	Pool	Mindouli	Mounkounkoto	PM28	S 04°05'89.4"	E 013°73'80.5"	02-05-19	PM28-1	<i>Acanthoscelides obtectus</i>	NA	ON808577
CB	St	Bouenza	Boko Songho	Boko Songho	C1BKSCH2	S 04°25'29.4"	E 013°40'33.9"	13-12-19	C1BKSCH2-1	<i>Acanthoscelides obtectus</i>	NA	ON808591
CB	St	Bouenza	Boko Songho	Boko Songho	C1BKSCH2	S 04°25'29.4"	E 013°40'33.9"	13-12-19	C1BKSCH2-2	<i>Acanthoscelides obtectus</i>	NA	ON808592
CB	St	Bouenza	Boko Songho	Boko Songho	C1BKSCH3	S 04°25'13.7"	E 013°40'29.7"	13-12-19	C1BKSCH3-1	<i>Acanthoscelides obtectus</i>	NA	ON808588
CB	St	Bouenza	Boko Songho	Boko Songho	C1BKSCH4	S 04°25'29.5"	E 013°40'39.9"	13-12-19	C1BKSCH4-1	<i>Acanthoscelides obtectus</i>	NA	ON808568
CB	St	Bouenza	Boko Songho	Boko Songho	C1BKSCH5	S 04°25'21.3"	E 013°40'20.7"	13-12-19	C1BKSCH5-1	<i>Acanthoscelides obtectus</i>	NA	ON808565
CB	St	Bouenza	Boko Songho	Boko Songho	C1BKSCH5	S 04°25'21.3"	E 013°40'20.7"	13-12-19	C1BKSCH5-2	<i>Acanthoscelides obtectus</i>	NA	ON808593
CB	St	Bouenza	Boko Songho	Boko Songho	C1BKSCH6	S 04°25'19.4"	E 013°40'19.9"	13-12-19	C1BKSCH6-1	<i>Acanthoscelides obtectus</i>	NA	ON808594
CB	St	Bouenza	Boko Songho	Boko Songho	C1BKSCH7	S 04°25'22.9"	E 013°39'35.5"	13-12-19	C1BKSCH7-1	<i>Acanthoscelides obtectus</i>	NA	ON808575
CB	St	Bouenza	Boko Songho	Boko Songho	C1BKSCH8	S 04°25'22.3"	E 013°39'24.0"	13-12-19	C1BKSCH8-1	<i>Acanthoscelides obtectus</i>	NA	ON808581

CB	St	Bouenza	Boko Songho	Boko Songho	C2BKSCH1	S 04°26'09.2"	E 013°38'40.0"	13-12-19	C2BKSCH1-1B	<i>Acanthoscelides obtectus</i>	NA	ON808582
CB	St	Bouenza	Boko Songho	Boko Songho	C2BKSCH2	S 04°26'11.6"	E 013°38'35.3"	13-12-19	C2BKSCH2-1B	<i>Acanthoscelides obtectus</i>	NA	ON808595
CB	St	Bouenza	Boko Songho	Boko Songho	C2BKSCH3	S 04°26'10.3"	E 013°38'34.4"	13-12-19	C2BKSCH3-1B	<i>Acanthoscelides obtectus</i>	NA	ON808571
CB	St	Bouenza	Boko Songho	Boko Songho	C2BKSCH5	S 04°26'09.6"	E 013°38'32.1"	13-12-19	C2BKSCH5-1	<i>Acanthoscelides obtectus</i>	NA	ON808569
CB	St	Bouenza	Boko Songho	Boko Songho	C2BKSCH5	S 04°26'09.6"	E 013°38'32.1"	14-12-19	C2BKSCH5-1B	<i>Acanthoscelides obtectus</i>	NA	ON808570
CB	St	Bouenza	Boko Songho	Boko Songho	C2BKSCH6	S 04°26'05.7"	E 013°38'29.4"	13-12-19	C2BKSCH6-1	<i>Acanthoscelides obtectus</i>	NA	ON808564
CB	St	Bouenza	Boko Songho	Boko Songho	C2BKSCH6	S 04°26'05.7"	E 013°38'29.4"	14-12-19	C2BKSCH6-1B	<i>Acanthoscelides obtectus</i>	NA	ON808589
CB	St	Bouenza	Boko Songho	Boko Songho	C2BKSCH7	S 04°26'40.3"	E 013°37'58.6"	13-12-19	C2BKSCH7-1B	<i>Acanthoscelides obtectus</i>	NA	ON808583
CB	St	Bouenza	Boko Songho	Boko Songho	C2BKSCH8	S 04°26'40.3"	E 013°37'58.5"	13-12-19	C2BKSCH8-1B	<i>Acanthoscelides obtectus</i>	NA	ON808586
CB	St	Plateaux	Lékana	Ntsoumbou	H1	S 02°22'43.7"	E 014°33'09.6"	13-12-19	LéK H 1-1p	<i>Mussidia</i> sp.	hap2	ON811003
CB	St	Plateaux	Lékana	Ntsoumbou	H2	S 02°22'44.3"	E 014°33'10.3"	13-12-19	LéK H2-1b	<i>Zabrotes subfasciatus</i>	NA	ON811004
CB	St	Plateaux	Lékana	Ntsoumbou	H4	S 02°22'43.0"	E 014°33'07.3"	13-12-19	LéK H4-1b	<i>Mussidia</i> sp.	hap2	ON811003
CB	St	Plateaux	Lékana	Ntsoumbou	H6	S 02°22'43.4"	E 014°33'04.3"	13-12-19	P6H-1	<i>Mussidia</i> sp.	hap2	ON811003
PP	Su	Niari	Kimongo	Kikassa1	PK3	S 04°18'69.9"	E 012°47'13.0"	26-04-19	P-PK3-1-a	Brentidae	hap1	ON810999
PP	Su	Niari	Kimongo	Kikassa3	PL2	S 04°17'15.0"	E 012°48'27.0"	26-04-19	P-PL2-1	Brentidae	hap1	ON810999
PP	Su	Niari	Kimongo	Mbouku-Mongo	PK8	S 04°24'15.6"	E 012°57'28.9"	27-04-19	P-PK8-2	Brentidae	hap2	ON811000
PP	Su	Niari	Londela Kayes	Moukonzi-Mongo	PL17	S 04°43'61.9"	E 013°17'50.0"	28-04-19	P-PL17-1	Brentidae	hap2	ON811000
PP	St	Bouenza	Loudima	Loudima	P1	S 04°14'83.8"	E 013°04'30.1"	13-12-19	SL1-0B	<i>Specularius erythraeus</i>	hap6	ON810768
PP	St	Bouenza	Loudima	Loudima	P1	S 04°14'83.8"	E 013°04'30.1"	13-12-19	P1M2LP-1B	<i>Specularius erythraeus</i>	hap4	ON810766
PP	St	Bouenza	Loudima	Loudima	P1	S 04°14'83.8"	E 013°04'30.1"	13-12-19	P1M3LP-1B	<i>Specularius erythraeus</i>	hap6	ON810768
PP	St	Bouenza	Loudima	Loudima	P1	S 04°14'83.8"	E 013°04'30.1"	13-12-19	P1M4LP-1	<i>Specularius erythraeus</i>	hap4	ON810766
PP	St	Bouenza	Loudima	Loudima	P1	S 04°14'83.8"	E 013°04'30.1"	13-12-19	P1M4LP-2B	<i>Specularius erythraeus</i>	hap3	ON810765
PP	St	Bouenza	Loudima	Loudima	P1	S 04°14'83.8"	E 013°04'30.1"	14-12-19	P1M4LP-1B	<i>Specularius erythraeus</i>	hap8	ON810770
PP	St	Bouenza	Loudima	Loudima	P10	S 04°09'47.5"	E 013°04'10.7"	13-12-19	P10MALP	<i>Mussidia</i> sp.	hap2	ON811003
PP	St	Bouenza	Loudima	Loudima	P10	S 04°09'47.5"	E 013°04'10.7"	13-12-19	P10M4LP	<i>Specularius erythraeus</i>	hap10	ON810772
PP	St	Bouenza	Loudima	Loudima	P2	S 04°14'86.8"	E 013°03'93.8"	13-12-19	P2M4LP	<i>Callosobruchus maculatus</i>	hap1	ON807156
PP	St	Bouenza	Loudima	Loudima	P2	S 04°14'86.8"	E 013°03'93.8"	13-12-19	SL2-1B	<i>Specularius erythraeus</i>	hap11	ON810773
PP	St	Bouenza	Loudima	Loudima	P3	S 04°14'85.2"	E 013°03'83.7"	13-12-19	P3M1LP-1B	<i>Specularius erythraeus</i>	hap4	ON810766
PP	St	Bouenza	Loudima	Loudima	P3	S 04°14'85.2"	E 013°03'83.7"	13-12-19	P3M2LP-1br	<i>Specularius erythraeus</i>	hap9	ON810771
PP	St	Bouenza	Loudima	Loudima	P5	S 04°19'58.0"	E 013°06'08.7"	13-12-19	P5M4LP-1B	<i>Callosobruchus maculatus</i>	hap2	ON807157
PP	St	Bouenza	Loudima	Loudima	P5	S 04°19'58.0"	E 013°06'08.7"	13-12-19	P5M1LP	<i>Callosobruchus maculatus</i>	hap2	ON807157
PP	St	Bouenza	Loudima	Loudima	P5	S 04°19'58.0"	E 013°06'08.7"	13-12-19	P5MALP	<i>Callosobruchus maculatus</i>	hap2	ON807157
PP	St	Bouenza	Loudima	Loudima	P5	S 04°19'58.0"	E 013°06'08.7"	13-12-19	P5M3LP-1B	<i>Specularius erythraeus</i>	hap6	ON810768
PP	St	Bouenza	Loudima	Loudima	P6	S 04°19'72.8"	E 013°06'02.6"	13-12-19	P6M1LP	<i>Callosobruchus maculatus</i>	hap3	ON807158
PP	St	Bouenza	Loudima	Loudima	P6	S 04°19'72.8"	E 013°06'02.6"	13-12-19	P6M3LP-1	<i>Specularius erythraeus</i>	hap4	ON810766
PP	St	Bouenza	Loudima	Loudima	P6	S 04°19'72.8"	E 013°06'02.6"	13-12-19	P6M4LP-1	<i>Specularius erythraeus</i>	hap9	ON810771
PP	St	Bouenza	Loudima	Loudima	P9	S 04°09'43.0"	E 013°04'38.8"	13-12-19	P9MALP-1	<i>Specularius erythraeus</i>	hap4	ON810766

PP	St	Bouenza	Loudima	Loudima	SL	S 04°14'91.1"	E 013°03'74.3"	13-12-19	SL-1	<i>Specularius erythraeus</i>	hap6	ON810768
PP	St	Bouenza	Loudima	Loudima	SL	S 04°14'91.1"	E 013°03'74.3"	13-12-19	SL-1B	<i>Specularius erythraeus</i>	hap10	ON810772
PP	St	Bouenza	Loudima	Loudima	SL3	S 04°15'37.0"	E 013°04'14.9"	13-12-19	SL3-1	<i>Specularius erythraeus</i>	hap6	ON810768
PP	St	Lekoumou	Sibiti	Lissiémi	SS	S 03°55'55.7"	E 013°09'11.2"	13-12-19	SS-1	<i>Specularius erythraeus</i>	hap4	ON810766
PP	St	Lekoumou	Sibiti	Lissiémi	SS	S 03°55'55.7"	E 013°09'11.2"	13-12-19	SS-1B	<i>Specularius erythraeus</i>	hap4	ON810766
PP	St	Niari	Kimongo	Kimongo centre	C1	S 04°30'43.4"	E 012°57'33.5"	25-09-19	C1-MA-NSC (mT)-1B	<i>Specularius erythraeus</i>	hap2	ON810764
PP	St	Niari	Kimongo	Kimongo centre	C1	S 04°30'43.4"	E 012°57'33.5"	26-09-19	SK-1B	<i>Specularius erythraeus</i>	hap7	ON810769
PP	St	Niari	Kimongo	Kimongo centre	C1	S 04°30'43.4"	E 012°57'33.5"	26-09-19	SK9 (T)-1B	<i>Specularius erythraeus</i>	hap5	ON810767
PP	St	Niari	Kimongo	Kimongo centre	C1	S 04°30'43.4"	E 012°57'33.5"	26-09-19	SK9-1B	<i>Specularius erythraeus</i>	hap5	ON810767
PP	St	Niari	Kimongo	Kimongo centre	C2	S 04°24'51.1"	E 012°55'75.4"	25-09-19	C2-Dg-NSC (mT)-1B	<i>Specularius erythraeus</i>	hap5	ON810767
PP	St	Niari	Kimongo	Kimongo centre	C2	S 04°24'51.1"	E 012°55'75.4"	25-09-19	C2-Dg-NSC (mT)-2	<i>Specularius erythraeus</i>	hap1	ON810763
PP	St	Niari	Kimongo	Kimongo centre	C2	S 04°24'51.1"	E 012°55'75.4"	26-09-19	SK10 (T)-1B	<i>Specularius erythraeus</i>	hap4	ON810766
PP	St	Niari	Kimongo	Kimongo centre	C2	S 04°24'51.1"	E 012°55'75.4"	26-09-19	SK10-1	<i>Specularius erythraeus</i>	hap6	ON810768
PP	St	Niari	Kimongo	Kimongo centre	C3	S 04°30'02.0"	E 012°59'42.6"	25-09-19	C3-KM-NSC (mT)-1B	<i>Specularius erythraeus</i>	hap5	ON810767
PP	St	Niari	Kimongo	Kimongo centre	C3	S 04°30'02.0"	E 012°59'42.6"	26-09-19	SK11(T)-1B	<i>Specularius erythraeus</i>	hap6	ON810768
PP	St	Niari	Kimongo	Kimongo centre	C3	S 04°30'02.0"	E 012°59'42.6"	26-09-19	SK11-1B	<i>Specularius erythraeus</i>	hap4	ON810766
PP	St	Niari	Kimongo	Kimongo centre	C4	S 04°30'39.2"	E 012°59'67.4"	25-09-19	C4-MA-NSC (mT)-1B	<i>Specularius erythraeus</i>	hap5	ON810767
PP	St	Niari	Kimongo	Kimongo centre	C4	S 04°30'39.2"	E 012°59'67.4"	25-09-19	C4-MA-NSC (mT)-2	<i>Specularius erythraeus</i>	hap6	ON810768
PP	St	Niari	Kimongo	Kimongo centre	C4	S 04°30'39.2"	E 012°59'67.4"	25-09-19	C4-MA-NSC-1B	<i>Specularius erythraeus</i>	hap9	ON810771
PP	St	Niari	Kimongo	Kimongo centre	C4	S 04°30'39.2"	E 012°59'67.4"	26-09-19	SK12 (T)-1B	<i>Specularius erythraeus</i>	hap4	ON810766
PP	St	Niari	Kimongo	Kimongo centre	C4	S 04°30'39.2"	E 012°59'67.4"	26-09-19	SK12-1B	<i>Specularius erythraeus</i>	hap5	ON810767
PP	St	Niari	Kimongo	Kimongo centre	C4	S 04°30'39.2"	E 012°59'67.4"	26-08-19	NIARI (proc)-1B	<i>Specularius erythraeus</i>	hap6	ON810768

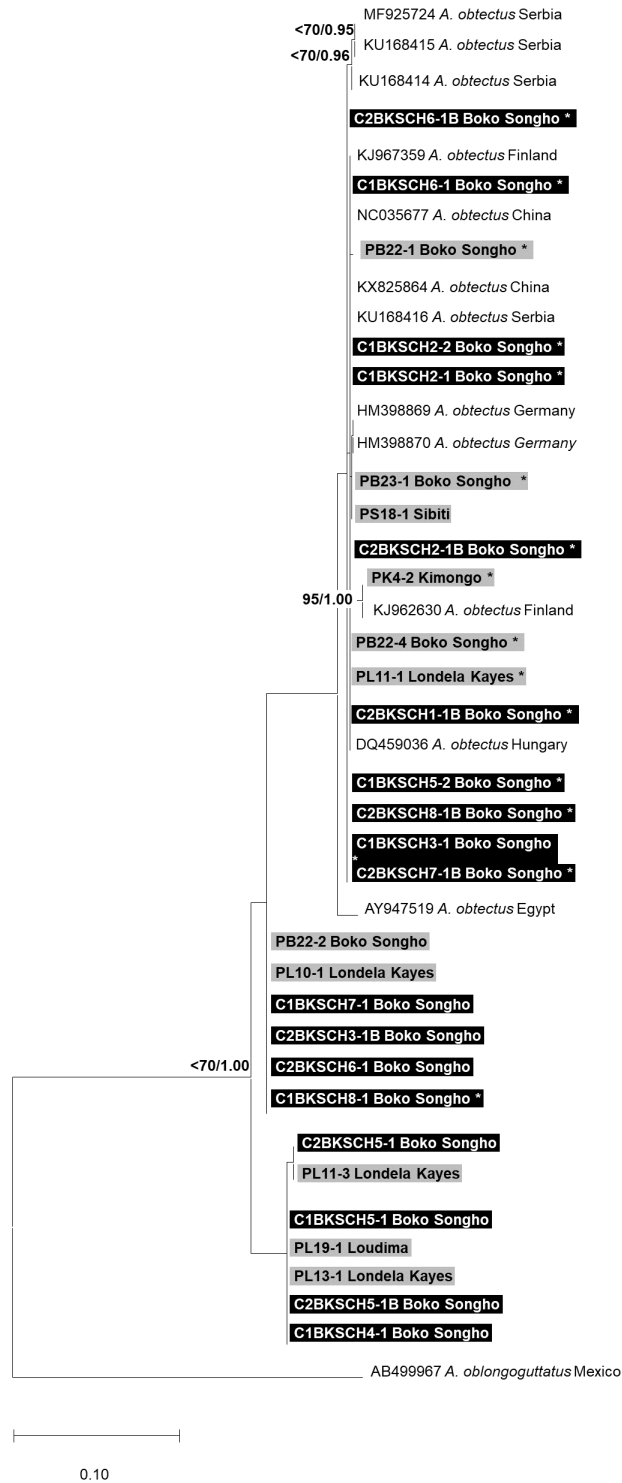


Figure S1. Maximum Likelihood phylogenetic tree based on COI sequences from Congolese *Acanthoscelides obtectus* collected on common bean (storage and plots) and from GenBank. IUPAC code was used to code polymorphisms and all heteroplasmic sites were treated as ambiguities. The phylogenetic tree is rooted with *Acanthoscelides oblongoguttatus* AB49967 sequence from GenBank. Bootstrap values > 70 and Bayesian posterior probabilities > 0.95 from Bayesian Inference tree are indicated at nodes. Samples from storage sites are indicated in grey boxes and samples from plots, in black boxes. Solid matches (> 99%) to *A. obtectus* according to BOLD IDs are annotated with an asterisk.