

## Additional file 2

**Table S1.** Description of habitat types, number of traps and collections made to investigate mosquito resting behaviour in study area.

Habitat type	Description	Traps per sampling night	Resting collections made per week
<b>Inside house</b>	All interior walls of every room in the home	4 x backpack aspiration	16 x backpack aspiration
<b>Under house</b>	Houses were raised on stilts ~0.5-1m above the ground, thus collections were performed in the gap between the ground and the house floor	12 x backpack aspiration 12 x resting buckets 12 x sticky resting buckets	48 x backpack aspiration 48 x resting buckets 48 x sticky resting buckets
<b>Around house</b>	The peri-domestic garden area, within 10m of the home	12 x backpack aspiration 12 x resting buckets 12 x sticky resting buckets	48 x backpack aspiration 48 x resting buckets 48 x sticky resting buckets
<b>Plantations (palm or rubber)</b>	Farming areas of 100-200m <sup>2</sup> where oil palm trees are being cultivated	12 x backpack aspiration 12 x resting buckets 12 x sticky resting buckets	48 x backpack aspiration 48 x resting buckets 48 x sticky resting buckets
<b>Forest edge</b>	The forest fringe at the join between forest patch and area of other land-use	12 x backpack aspiration 12 x resting buckets 12 x sticky resting buckets	48 x backpack aspiration 48 x resting buckets 48 x sticky resting buckets
<b>Forest ground level</b>	20m inside the forest patch on the forest floor	12 x backpack aspiration 12 x resting buckets 12 x sticky resting buckets	48 x backpack aspiration 48 x resting buckets 48 x sticky resting buckets
<b>Forest canopy</b>	20m inside the forest hanging in trees at 2.5-9m above ground level	12 x sticky resting buckets	48 x sticky resting buckets

**Table S2.** Resting *Aedes* mosquitoes collected using CDC, RB and SRB trapping methods in eight habitats arising from deforestation.

Trap	<i>Aedes</i> species	Habitat type								Sum
		Inside house	Under house	Around house	Palm plantation	Rubber plantation	Forest edge	Forest ground level	Forest canopy	
<b>RB</b>	<i>Ae. albopictus</i> F	×	4	3	0	0	2	3	×	12
	<i>Ae. albopictus</i> M	×	0	7	0	4	7	6	×	24
	<i>Ae. aegypti</i> F	×	0	3	0	0	0	1	×	4
	<i>Ae. aegypti</i> M	×	0	4	0	0	1	0	×	5
	Unknown <i>Aedes</i> F	×	4	2	0	2	1	4	×	13
	Unknown <i>Aedes</i> M	×	0	1	0	8	7	6	×	22
	Total	×	8	20	0	14	18	20	×	80
<b>SRB</b>	<i>Ae. albopictus</i> F	×	7	3	5	16	27	15	9	82
	<i>Ae. albopictus</i> M	×	0	1	4	13	22	7	2	49
	<i>Ae. aegypti</i> F	×	1	0	0	0	4	2	1	8
	<i>Ae. aegypti</i> M	×	0	0	0	0	1	0	0	1
	Unknown <i>Aedes</i> F	×	0	2	1	4	6	6	2	21
	Unknown <i>Aedes</i> M	×	0	0	0	0	7	3	0	10
	Total	×	8	6	10	33	67	33	14	171
<b>CDC</b>	<i>Ae. albopictus</i> F	0	6	4	3	1	4	5	×	23
	<i>Ae. albopictus</i> M	0	2	11	1	3	18	15	×	50
	<i>Ae. aegypti</i> F	0	0	1	0	0	3	0	×	4
	<i>Ae. aegypti</i> M	0	0	0	0	0	1	1	×	2
	Unknown <i>Aedes</i> F	3	10	16	1	5	5	12	×	52
	Unknown <i>Aedes</i> M	0	4	16	4	22	27	28	×	101
	Total	3	22	48	9	31	58	61	×	232
	Overall sum	3	38	74	19	78	143	114	14	483

**Table S3.** Resting *Culex* mosquitoes collected using CDC, RB and SRB trapping methods in eight habitats arising from deforestation.

Trap	<i>Culex</i> subspecies	Habitat type								Total
		Inside house	Under house	Around house	Palm plantation	Rubber plantation	Forest edge	Forest ground level	Forest canopy	
RB	<i>Culex</i> F	×	5	3	0	0	0	0	×	8
	<i>Culex</i> M	×	10	1	0	1	0	2	×	14
	<i>Culiciomyia</i> F	×	0	0	0	0	1	0	×	1
	<i>Culiciomyia</i> M	×	0	0	0	0	2	0	×	2
	<i>Eumelanomyia</i> F	×	2	1	0	0	1	2	×	6
	<i>Eumelanomyia</i> M	×	2	1	0	0	0	2	×	5
	<i>Lophoceraomyia</i> F	×	2	0	0	0	1	0	×	3
	<i>Lophoceraomyia</i> M	×	9	5	0	2	0	0	×	16
	<i>Oculeomyia</i> F	×	0	0	0	0	0	0	×	0
	<i>Oculeomyia</i> M	×	0	0	0	0	0	0	×	0
	subgenera unknown F	×	27	46	19	3	5	41	×	141
	subgenera unknown M	×	44	72	16	4	3	34	×	173
	Total	×	101	129	35	10	13	81	×	369
SRB	<i>Culex</i> F	×	9	2	1	4	0	1	0	17
	<i>Culex</i> M	×	2	1	0	0	0	0	0	3
	<i>Culiciomyia</i> F	×	0	1	0	0	1	0	0	2
	<i>Culiciomyia</i> M	×	0	0	0	0	0	0	0	0
	<i>Eumelanomyia</i> F	×	1	0	0	0	1	0	1	3
	<i>Eumelanomyia</i> M	×	1	0	0	0	1	1	0	3
	<i>Lophoceraomyia</i> F	×	0	0	0	0	0	0	0	0
	<i>Lophoceraomyia</i> M	×	0	0	0	0	0	1	0	1
	<i>Oculeomyia</i> F	×	0	1	0	0	0	0	0	1
	<i>Oculeomyia</i> M	×	0	0	0	0	0	1	0	1
	subgenera unknown F	×	10	36	7	1	4	17	9	84
	subgenera unknown M	×	4	7	4	0	2	12	2	31
	Total	×	27	48	12	5	9	33	12	146
CDC	<i>Culex</i> F	3	3	1	0	1	0	1	×	7
	<i>Culex</i> M	0	3	1	0	0	0	0	×	4
	<i>Culiciomyia</i> F	0	1	0	0	0	0	0	×	1
	<i>Culiciomyia</i> M	0	1	0	0	0	0	0	×	1
	<i>Eumelanomyia</i> F	0	1	1	0	0	0	1	×	3
	<i>Eumelanomyia</i> M	0	1	0	0	0	0	0	×	1

	<i>Lophoceraomyia</i> F	0	6	1	0	0	3	1	×	11
	<i>Lophoceraomyia</i> M	0	4	0	0	1	1	0	×	6
	<i>Oculeomyia</i> F	0	0	0	0	0	0	0	×	0
	<i>Oculeomyia</i> M	0	0	0	0	0	0	0	×	0
	subgenera unknown F	16	47	28	4	1	3	10	×	109
	subgenera unknown M	44	269	47	1	9	2	6	×	378
	Total	63	336	79	5	12	9	19	×	523
	Overall sum	63	464	256	52	27	31	133	12	1038

**Table S4.** Resting medically important *Culex* species collected using CDC, RB and SRB trapping methods in eight habitats arising from deforestation.

Trap	<i>Culex</i> vectors of medical importance	Habitat type							
		Inside house	Under house	Around house	Palm plantation	Rubber plantation	Forest edge	Forest ground level	Forest canopy
<b>RB</b>	<i>Cx. quinquefasciatus</i>	×	5	1	3	0	0	0	×
	<i>Cx. fuscocephala</i>	×	0	0	0	0	0	0	×
	<i>Cx. sitiens</i>	×	0	0	1	0	0	0	×
<b>SRB</b>	<i>Cx. quinquefasciatus</i>	×	0	3	7	0	0	0	0
	<i>Cx. fuscocephala</i>	×	0	3	0	0	0	0	0
	<i>Cx. sitiens</i>	×	0	0	1	0	0	0	0
<b>CDC</b>	<i>Cx. quinquefasciatus</i>	0	1	0	9	0	0	0	×
	<i>Cx. fuscocephala</i>	0	0	0	0	0	0	0	×
	<i>Cx. sitiens</i>	0	1	0	0	0	0	0	×

**Table S5.** Blood-fed female resting mosquitoes obtained throughout the study.

	Habitat type	Genera of blood-fed females							Total
		<i>Culex</i>	<i>Aedes</i>	<i>Uranotaenia</i>	<i>Armigeres</i>	<i>Tripteroides</i>	<i>Lutzia</i>	Unknown	
<b>RB</b>	Under House	13	3	0	0	0	0	0	16
	Around House	18	2	0	0	0	0	0	20
	Palm	5	0	1	0	0	0	0	6
	Rubber	2	0	0	0	0	0	0	2
	Forest edge	1	0	0	0	0	0	0	1
	Forest interior	1	0	0	0	0	0	0	1
	<b>SRB</b>	Under House	5	2	0	1	2	1	1
Around House		22	0	0	0	0	0	0	22
Palm		4	0	0	0	0	0	0	4
Rubber		0	0	0	0	0	0	0	0
Forest edge		0	0	0	0	0	0	0	0
Forest interior		3	1	0	0	0	0	0	4
Forest canopy		0	1	0	0	0	0	0	1
<b>CDC</b>	Inside House	5	1	0	0	0	0	0	6
	Under House	8	3	0	0	0	0	0	11
	Around House	7	2	0	0	1	0	0	10
	Palm	2	0	0	0	0	0	0	2
	Rubber	2	1	0	0	0	0	0	3
	Forest edge	1	0	0	0	0	0	0	1
	Forest interior	1	3	0	0	1	0	0	5
	Overall sum	100	19	1	1	4	1	1	127

**Table S6.** Blood meal hosts of engorged female mosquitoes. Hosts were identified using PCR and sequencing of the vertebrate cytochrome *b* mitochondrial gene.

<b>Genera</b>	<b>Subgenera or species</b>	<b>Habitat</b>	<b>Trap</b>	<b>Blood-meal host</b>	<b>Number of mosquitoes</b>
<i>Culex</i>	Unknown	Around house	CDC	<i>Gallus gallus</i>	4
<i>Culex</i>	<i>Culex</i> (1), <i>Cx. quinquefasciatus</i> (1)	Around house	RB	<i>Gallus gallus</i>	10
<i>Culex</i>	Unknown	Around house	SRB	<i>Gallus gallus</i>	9
<i>Culex</i>	<i>Culex</i> (2), <i>Oculeomyia</i> (1)	Under house	CDC	<i>Gallus gallus</i>	3
<i>Culex</i>	Unknown	Under house	RB	<i>Gallus gallus</i>	2
<i>Culex</i>	<i>Cx. quinquefasciatus</i> (2)	Under house	SRB	<i>Gallus gallus</i>	2
<i>Armigeres</i>	<i>Arm. moultoni</i>	Under house	SRB	<i>Gallus gallus</i>	1
<i>Lutzia</i>	<i>Lt. vorax</i>	Under house	SRB	<i>Gallus gallus</i>	1
<i>Culex</i>	Unknown (1), <i>Cx. fuscocephala</i> (1)	House indoor	CDC	<i>Homo sapiens</i> , <i>Gallus gallus</i>	2
<i>Culex</i>	Unknown	Palm	RB	<i>Gallus gallus</i>	1
<i>Culex</i>	Unknown	Palm	SRB	<i>Gallus gallus</i>	2
<i>Aedes</i>	<i>Stegomyia</i>	Rubber	CDC	<i>Homo sapiens</i>	1

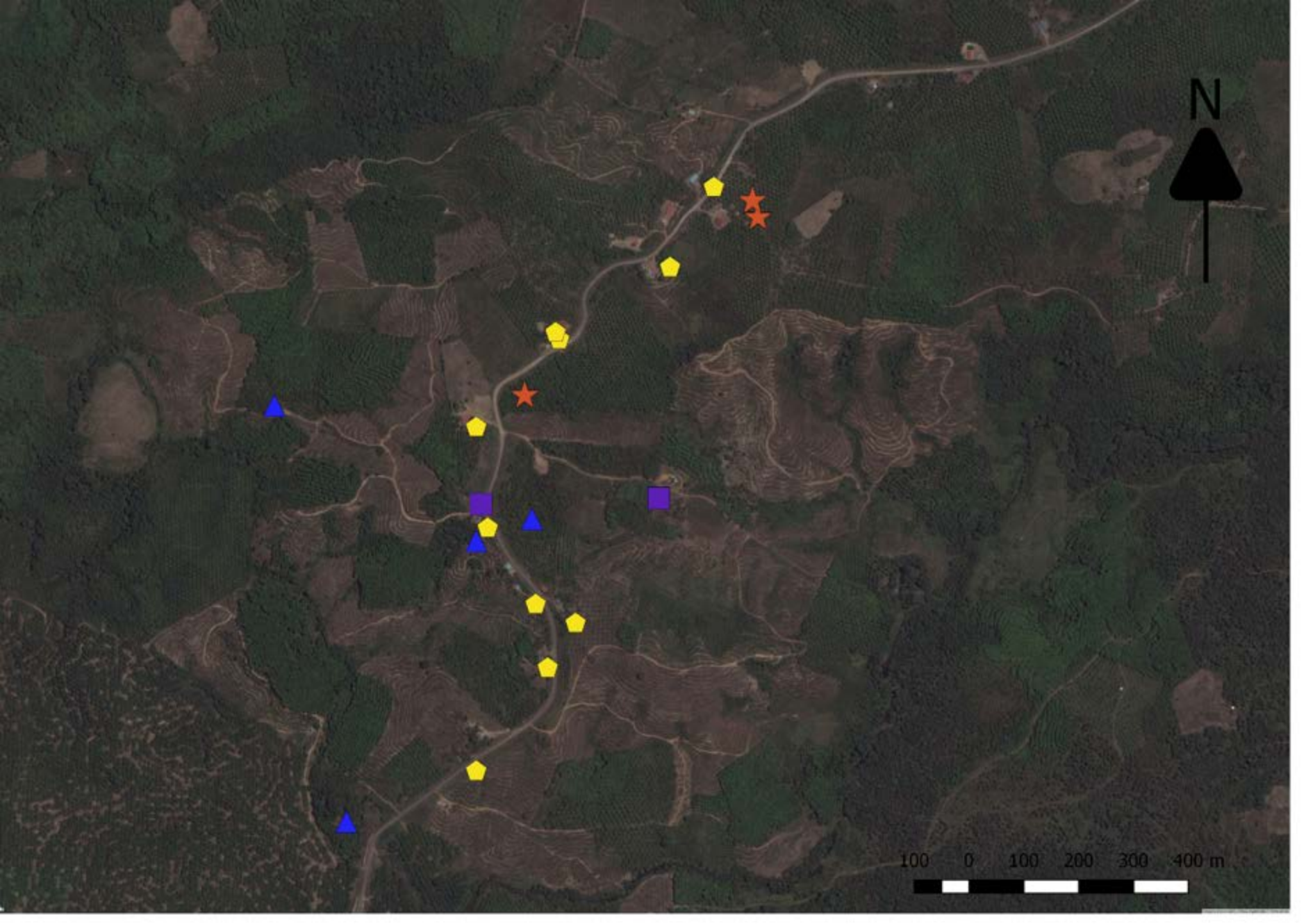


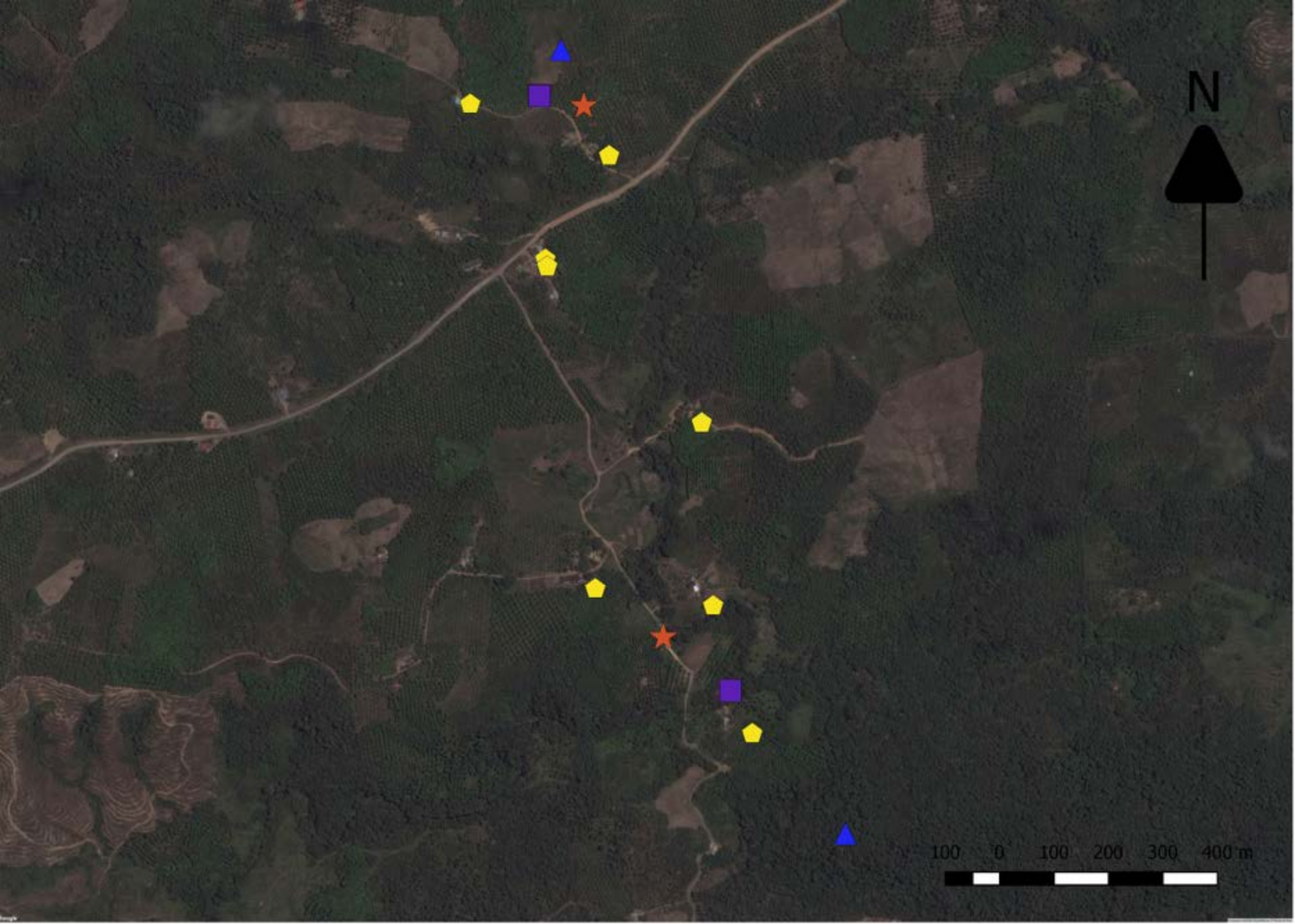




**A****B****C****H****D****E****F****G**

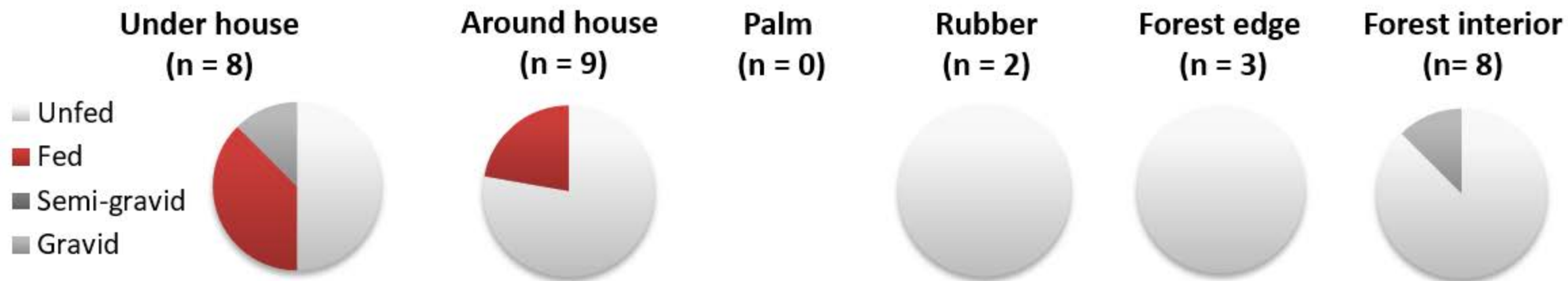




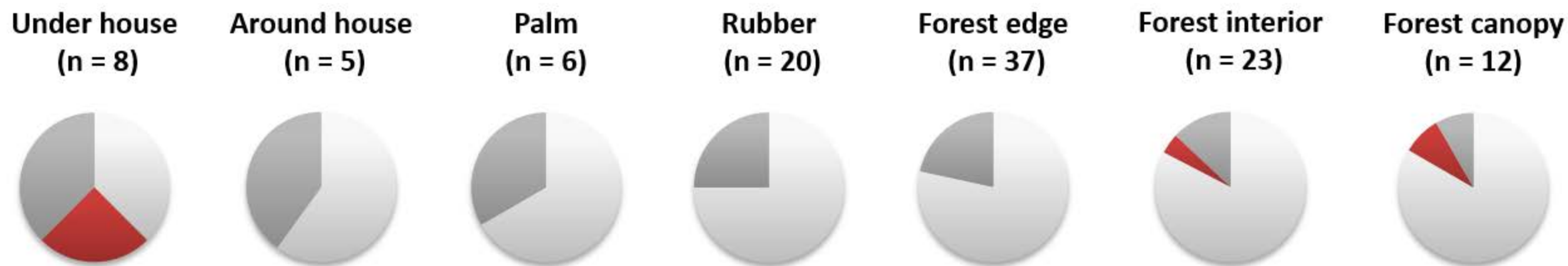




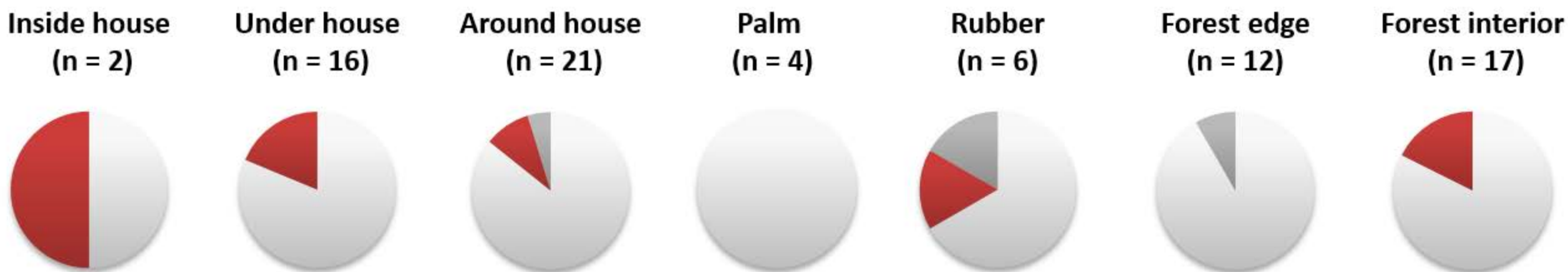
## Resting Bucket Traps



## Sticky Resting Bucket Traps

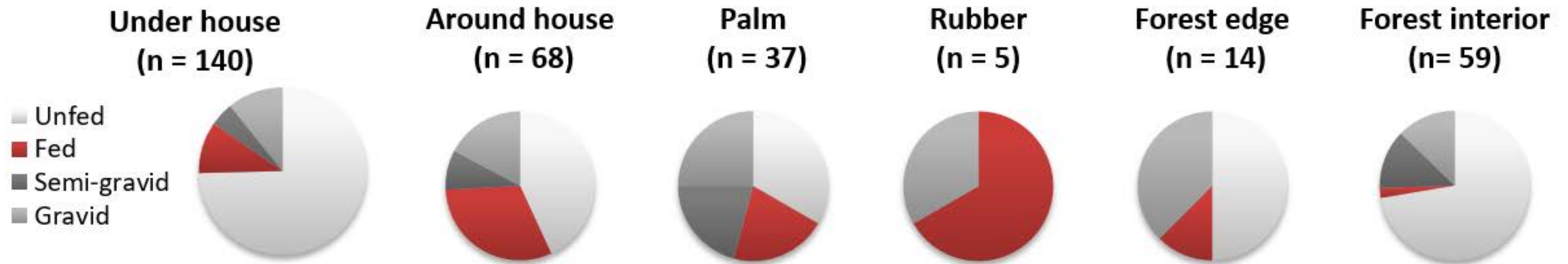


## CDC Backpack Aspiration





## Resting Bucket Traps



## Sticky Resting Bucket Traps



## CDC Backpack Aspiration

