

**Additional File 1 Activity of detoxifying enzymes in *Aedes aegypti* adults from sampled populations compared to the Rockefeller colony**

Sample	Glutathione S-transferase (GST) (mmol/mg ptn/min)				$\alpha$ -esterase (nmol/mg ptn/min)				$\beta$ -esterase (nmol/mg ptn/min)				Esterases-PNPA ( $\Delta$ abs/mg ptn/min)				Mixed function oxidases (nmol/mg ptn/min)			
	N <sup>a</sup>	p99 <sup>b</sup>	% >p99 <sup>c</sup>	S <sup>d</sup>	N	p99	% >p99	S	N	p99	% >p99	S	N	p99	% >p99	S	N	p99	% >p99	S
	Rockefeller	114	1.97	-	-	104	65.87	-	-	112	98.83	-	-	119	5.33	-	-	113	47.35	-
RecL	69	2.58	4	U	74	75.63	11	U	120	108.41	3	U	120	5.55	2	U	103	59.06	8	U
RecR (F20) <sup>e</sup>	115	3.49	26	A	116	116.81	47	A	113	114.94	4	U	100	6.36	6	U	117	63.27	34	A
Rockefeller	123	1.41	-	-	120	49.30	-	-	113	73.58	-	-	116	3.69	-	-	119	66.12	-	-
F. Noronha	115	2.97	69	HA	83	96.34	17	A	99	166.33	12	U	108	6.54	71	HA	118	70.52	3	U
Bacabal	110	2.59	73	HA	110	56.91	20	A	90	76.30	2	U	111	6.89	27	A	116	97.63	28	A
Recife	151	2.58	33	A	192	56.52	9	U	186	70.54	1	U	151	5.14	13	U	189	73.05	4	U
Macapá	117	2.60	38	A	119	77.84	62	HA	116	138.52	42	A	108	8.12	69	HA	101	75.47	7	U
J. Pessoa	115	3.29	76	HA	114	72.35	33	A	111	68.04	1	U	112	8.02	71	HA	74	61.79	0	U
Salgueiro	115	2.53	83	HA	115	67.97	11	U	112	71.08	2	U	114	8.81	82	HA	106	118.09	38	A
Agrestina	76	3.68	61	HA	145	63.35	25	A	151	73.93	1	U	94	7.20	37	A	138	85.48	20	A
G. Goitá	112	3.66	42	A	99	64.59	19	A	103	95.30	4	U	113	5.57	31	A	77	73.63	9	U
A. Ingazeira	150	2.65	55	HA	117	105.53	68	HA	118	94.67	27	A	154	7.34	62	HA	152	78.66	5	U
Oiapoque	97	2.93	42	A	111	77.20	58	HA	111	119.97	14	U	107	11.31	79	HA	114	79.65	8	U
Cedro	114	5.07	87	HA	116	80.44	41	A	116	91.99	6	U	114	7.43	48	A	117	111.01	54	HA
S.J. Egito	118	2.79	75	HA	110	62.10	11	U	116	82.60	3	U	105	5.26	21	A	107	199.73	22	A
S.C. Capibaribe	115	2.81	86	HA	118	69.56	31	A	111	76.71	3	U	114	9.12	87	HA	116	71.79	6	U
Araripina	80	2.22	29	A	115	100.17	59	HA	116	93.38	14	U	39	5.43	31	A	72	44.59	0	U

<sup>a</sup> Number of tested individuals.

<sup>b</sup> 99<sup>th</sup> Percentile for the populations.

<sup>c</sup> Percentual of individuals that display an activity higher than the 99<sup>th</sup> Percentile of the Rockefeller reference.

<sup>d</sup> Classification of enzyme activity (Brasil, 2006) compared to control (Rockefeller): unaltered (U); altered (A) and highly altered (HA).

<sup>e</sup> Data on this line are the reference for the samples below.