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Author(s): Piiroinen, Saija; Lindström, Leena; Lyytinen, Anne; Mappes, Johanna; Chen, Yolanda H;

Izzo, Victor; Grapputo, Alessandro

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## **Online Supplementary material:**

Piiroinen et al. "Pre-invasion history and demography shape the genetic variation in the insecticide resistance-related acetylcholinesterase 2 gene in the invasive Colorado potato beetle".

**Additional file 2** Frequencies (%) of observed patterns of non-synonymous mutations of *AChE2* variants in North American and European Colorado potato beetle populations. S291G and R30K have been associated with organophosphate resistance in the species

		Observed Frequencies (%)										
Pattern	Non-synonymous mutation	Haplotype(s)	Morelos	Oaxaca	Puebla	Kansas	Colorado	Russia	Finland	Estonia	Poland	Italy
a	-	h2,h22	-	-	-	5.6	5	45	-	20	30	50
b	S291G	h1,h4-h7,	-	-	38.9	88.9	60	50	85	60	70	30
		h10,h13,h15,										
		h16,h18,h20										
		h21,h24-h29,										
		h31,h32, h33,										
		h36,h37,h39,h41										
c	S291G, Y54H,	h3,h9,h17	_	_	_	_	5	5	15	20	_	20
d	S291G, R30K	h12	_	_	_	_	5	_	_	_	_	_
e	S291G, P150S	h11	-	-	_	_	5	-	-	-	-	-
f	S291G, T151S	h14	_	_	_	_	5	_	_	_	_	_
g	S291G, L50M	h19	-	_	_	_	10	_	-	-	_	_
h	S291G, R30K, A238D	h23	-	-	-	-	5	-	-	-	-	-
i	S291G, S55A	h30	-	-	-	5.6	-	-	-	-	-	-
j	S291G, A239T	h34,h35,h38	-	-	55.6	-	-	-	-	-	-	-
k	S291G, Q3K	h40	-	-	5.6	-	-	-	-	-	-	-
1	S291G, Y205F	h42-h47, h50	80	95	_	_	-	-	-	-	-	-
m	S291G, Y205F, P41S	h48,h49	20	5	-	-	-	-	-	-	-	-