Online Resource 1 – Supplementary Tables

Crowdsourced online data as evidence of absence of non-target effects from the century-old introduction of *Istocheta aldrichi* for biological control of *Popillia japonica* in North America

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Table S1. Accuracy, overconfidence (observations identified to a lower taxonomic level than is possible with a photograph) and underconfidence (observations identified at a higher taxonomic level than possible with a photograph) of subsamples of observations from the Canadian and USA datasets, as determined by a taxonomic expert.

Dataset	Total N	Accurate identifications, any taxonomic level (%)	Accurate identifications, species-level (%)	Over-confidently identified observations (%)	Under-confidently identified observations (%)
Canada	300	94.9	98.3	2.1	27.3
Northeastern USA	400	94.9	94.9	8.4	10.5

Table S2. Accuracy, overconfidence (observations identified to a lower taxonomic level than is possible with a photograph) and underconfidence (observations identified at a higher taxonomic level than possible with a photograph) of subsamples of observations from the filtered Canadian and USA datasets (see Methods), as determined by a taxonomic expert.

Dataset	Total N	Accurate identifications, genus-level (%)	Accurate identifications, species-level (%)	Overconfidently identified observations (%)	Underconfidently identified observations (%)
Canada (filtered)	266	92.0	100.0	1.9	20.3
Northeastern USA (filtered)	377	93.8	94.6	6.7	5.0

Table S3. Observations of Scarabaeidae within the geographic range of *I. aldrichi* with candidate parasitoid eggs that have dissimilar morphology to *I. aldrichi* eggs.

Subfamily	Identification	Date observed	Location (GPS)	iNaturalist observation number (with hyperlink)
Rutelinae	*Pelidnota punctata* (Linnaeus)	July 19, 2022	42.5947, -72.2289	127054324
Melolonthinae	*Diplotaxis* sp.	May 29, 2020	43.9408, -72.3253	47806012
Melolonthinae	*Diplotaxis tristis* Kirby [a]	August 4, 2022	44.2522, -68.3673	179760601
Melolonthinae	*Hoplia* sp.	May 21, 2021	43.6211, -72.5075	80394914
Melolonthinae	*Hoplia* sp.	May 21, 2022	43.5965, -72.6096	118019183
Melolonthinae	*Hoplia trifasciata* Say[a]	June 10, 2018	43.7517, -72.3689	13302726
Melolonthinae	*Hoplia trifasciata* Say[a]	June 16, 2018	42.2236, -74.1268	16230880
Melolonthinae	*Hoplia trifasciata* Say[a]	May 26, 2021	46.3967, -72.6028	80403354
Melolonthinae	*Hoplia trifasciata* Say[a]	May 26, 2021	46.3967, -72.6028	80403554
Melolonthinae	*Hoplia trifasciata* Say[a]	May 25, 2022	44.1120, -72.8559	118678319
Melolonthinae	*Phyllophaga rugosa* (Melsheimer)[a]	June 5, 2020	44.2003, -79.4752	48579161
Melolonthinae	*Phyllophaga* sp.	May 28, 2018	44.9974, -78.4508	12911643
Melolonthinae	*Phyllophaga* sp.	June 2, 2019	42.1944, -74.1728	26263791
Melolonthinae	*Phyllophaga* sp.	June 10, 2019	45.5495, -78.6357	26753323
Melolonthinae	*Phyllophaga* sp.	June 3, 2020	45.2001, -77.9247	48336993
Melolonthinae	*Phyllophaga* sp.	June 3, 2020	43.3603, -79.9349	71607185
Melolonthinae	*Phyllophaga* sp.	May 19, 2021	44.9033, -71.4838	79415822
Melolonthinae	*Phyllophaga* sp.	May 21, 2021	46.3967, -72.6028	79715961
Melolonthinae	*Phyllophaga* sp.	May 21, 2021	45.4539, -75.6557	79873121
Melolonthinae	*Phyllophaga* sp.	May 20, 2022	43.5931, -72.3368	117956364
Melolonthinae	*Phyllophaga* sp.	May 31, 2022	44.9728, -78.2747	119573203
Melolonthinae	*Phyllophaga* sp.[a]	June 7, 2022	44.6889, -77.2124	122122998
Melolonthinae	*Serica sericea* (Illiger)[a]	June 16, 2020	44.3974, -79.5402	52319898
Melolonthinae	*Serica sericea* (Illiger)[a]	June 10, 2021	46.3967, -72.6028	82520847
Melolonthinae	*Serica* sp.	June 13, 2021	44.2681, -77.5086	82884608
Melolonthinae	*Serica* sp.	June 22, 2021	44.9467, -75.7225	86223270
Melolonthinae	*Serica* sp.	June 6, 2022	45.5423, -75.7948	122988367
Melolonthinae	*Serica* sp.	June 26, 2022	45.9280, -73.5303	123479759
Melolonthinae	*Serica* sp.[a]	June 25, 2022	45.5082, -75.4550	123555629

[a] A.B.T Smith corrected or improved on these identifications from identifications previously made on iNaturalist.org *a posteriori* (i.e, after January 10, 2025).

Table S4. Observations of selected non-target Scarabaeidae species (i.e., species that were found to have candidate *I. aldrichi* eggs on them in the northeastern North American survey; see Table 1) from an area of Minnesota and Wisconsin (delimiting latitudes: 43.5565, 46.4908; delimiting longitudes: -94.2222, -89.5091) where a project on iNaturalist, the Midwest Winsome Fly Survey (https://www.inaturalist.org/projects/midwest-winsome-fly-survey) has documented the distribution of *I. aldrichi* following its redistribution to Minnesota from 1998 to 2006 (Hutchinson et al. 2024). Observations were inspected in January 2025.

Species	**Total number of records**	**Number of records of sufficient quality**[a]	**Number of records with *I. aldrichi*-like eggs (% of observations)**[b]
Popillia japonica	2,371	2,306	335 (14.5%)
Cotalpa lanigera	90	89	1 (1.1%)[c]
Pelidnota punctata	349	331	0 (0.0%)
Hoplia sp.	43	42	0 (0.0%)

[a] Photographs that were sufficiently clear to observe whether or not there was a candidate parasitoid egg, were not obvious misidentifications, and depicted whole adult beetles with at least some of their pronotum area visible.

[b] Of observations that are sufficient quality.

[c] Observation made on May 31, 2021 by iNaturalist user safechrislaurie; #81170711.