

Title: **Occurrence of the non-native species *Ophraella communa* on *Ambrosia artemisiifolia* in north-eastern Italy, with records from Slovenia and Croatia**

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Bulletin of Insectology, Volume 73 June 2020 pages 87-94

Table S1. Occurrence of *Ophraella communa* in 2017 at 79 sites from north-eastern Italy, western Slovenia and north-western Croatia. Seventy-seven sites with or without the presence of *O. communa* on *Ambrosia artemisiifolia* are listed. At two of these sites, each marked with one asterisk (*), *O. communa* was found on both *A. artemisiifolia* and *Xanthium orientale italicum*. In addition, at two sites, each marked with two asterisks (**), *O. communa* was found on *Helianthus annuus* and *Erigeron canadensis* alone, respectively. Localities, dates of observation, habitats and presence/absence of different stages of *O. communa* are given.

Stages of *O. communa* observed: A: adult; E: egg; L: larva; P: pupa in the cocoon. No beetles: no *O. communa* eggs or specimens at any development stage present on the host plant. Damage levels to host plant: 0, no trace of feeding damage but adults or eggs of the beetle present; 1, light feeding damage on a few leaves; 2, feeding damage on some leaves; 3, many leaves with feeding damage; 4, defoliation, plants partially dried; 5, complete defoliation and reproductive structures injured. Population levels of *O. communa* observed per site: very low, less than 5-10 individuals or rare egg clusters; low, less than 20 individuals active, some egg clusters; middle, more than 20 individuals active, several egg clusters; high, massive presence of any of the development stages.

Site	Locality	Geographic coordinates	Altitude a.s.l. (m)	Habitat <i>A. artemisiifolia</i> presence (or other host plant with <i>O. communa</i>)	Date	<i>O. communa</i> stage, damage and population level
(1-5) North-eastern Italy, Veneto region (districts of Treviso TV and Venezia VE)						
1	Scomigo, Conegliano Veneto, TV	45°56'34.99"N 12°18'18.00"E	99	Green zone in the highway parking area 10-20 plants	14 Sept	AL, 2, low
2	Godega di Sant'Urbano, TV	45°55'40.44"N 12°22'59.82"E	59	Parking place in disturbed suburban area 10-20 plants	7 Oct	A, 5, high
3	San Stino di Livenza, VE	45°43'16.03"N 12°40'58.03"E	5	Flowerbed overgrown with weeds, train station A few plants	26 Aug	AEL, 2, low
4	Bacino Villa, Caorle, VE	45°41'03.00"N 12°57'11.00"E	2	Parking area near canal embankment A few plants	10 Aug 8 Oct	AELP, 2, middle A, 5, high
5*	Brussa, Caorle, VE	45°38'57.00"N 12°58'24.00"E	0	Roadside, near canal embankment and crop field A few plants <i>(X. orientale italicum)</i>	10 Aug	AELP, 3, middle (AL, 1, very low)
(6-63) North-eastern Italy, Friuli Venezia Giulia region (districts of Pordenone PN, Udine UD, Gorizia GO and Trieste TS)						
6	Ponte di Mezzo Canale, Barcis, PN	46°13'13.88"N 12°29'37.01"E	454	Roadside 10-20 plants	18 Aug	AELP, 1, low
7	Arcola, Barcis, PN	46°11'57.29"N 12°31'33.28"E	507	Roadside 10-20 plants	18 Aug	AELP, 1, low
8	Fontanafredda, PN	45°57'29.00"N 12°33'20.00"E	31	Railway ballast More than 100 plants	7 Oct	AELP, 5, high

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(Table S1 continued)

Site	Locality	Geographic coordinates	Altitude a.s.l. (m)	Habitat <i>A. artemisiifolia</i> presence (or other host plant with <i>O. communa</i>)	Date	<i>O. communa</i> stage, damage and population level
9	Maniago, PN	46°07'35.46"N 12°43'30.24"E	247	Roadside 40-50 plants	18 Aug	AELP, 3, middle
10	Casale Venante, Vivaro, PN	46°03'41.41"N 12°47'53.31"E	106	Magredi 40-50 plants	28 July	AELP, 2, low
11	Casale Venante, Vivaro, PN	46°03'04.03"N 12°47'35.33"E	95	Magredi 40-50 plants	28 July	AELP, 2, low
12	Rauscedo, San Giorgio della Richinvelda, PN	46°01'59.55"N 12°47'24.16"E	77	Magredi 40-50 plants	28 July	AELP, 2, low
13	Pozzo, San Giorgio della Richinvelda, PN	46°02'54.65"N 12°54'28.76"E	81	Tagliamento River, disturbed dry grassland 40-50 plants	26 Sept	AE, 3, middle
14	Spilimbergo, PN	46°06'12.00"N 12°55'31.00"E	102	Tagliamento River, bank on riverside A few plants	13 July	LP, 3, high
15*	Cornino, Forgaria nel Friuli, UD	46°13'21.66"N 13° 01'44.70"E	158	Tagliamento River, gravel on river bed A few plants <i>(X. orientale italicum)</i>	26 Aug	AELP, 2, low (AELP, 1, low)
16	Enemonzo, UD	46°24'33.29"N 12°52'11.05"E	441	Farm road, potato field A few plants	8 Aug	AE, 2, low
17	Amaro, UD	46°22'11.49"N 13°04'06.60"E	274	Disturbed site in industrial area 40-50 plants	8 Aug	AELP, 3, middle
18	Amaro, UD	46°21'48.00"N 13°06'50.00"E	250	Tagliamento River, bank on riverside A few plants	10 July	E, 1, very low
19	Resiutta, UD	46°23'48.12"N 13°11'41.81"E	331	Roadside 40-50 plants	17 Aug	AELP, 2, middle
20	Resiutta, UD	46°23'49.00"N 13°11'45.00"E	319	Roadside 40-50 plants	27 Aug	AE, 2, low
21	Resiutta, UD	46°23'43.00"N 13°12'41.00"E	323	Roadside 40-50 plants	21 Oct	AL, 4, high
22	Villanova, Chiusaforte, UD	46°23'51.00"N 13°16'52.00"E	375	Roadside 10-20 plants	27 Aug	ALP, 2, low
23	Valcanale, Pontebba, UD	46°30'32.00"N 13°19'21.00"E	570	Roadside and ditch 40-50 plants	18 Aug	No beetles
24	Dogna, UD	46°27'24.00"N 13°18'16.00"E	451	Roadside, parking area along state road More than 100 plants	27 Aug	No beetles
25	Reana del Rojale, UD	46°08'07.44"N 13°13'38.93"E	159	Roadside, disturbed area A few plants	12 Aug	AELP, 1, low
26	Feletto Umberto, Tavagnacco, UD	46°06'39.75"N 13°13'27.26"E	137	Roadside, waste area 10-20 plants	8 Aug	AEP, 2, low
27	Feletto Umberto, Tavagnacco, UD	46°05'38.59"N 13°13'28.62"E	126	Roadside More than 100 plants	2 Aug 7 Oct	AEL, 3, high A, 5, high

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(Table S1 continued)

Site	Locality	Geographic coordinates	Altitude a.s.l. (m)	Habitat <i>A. artemisiifolia</i> presence (or other host plant with <i>O. communa</i>)	Date	<i>O. communa</i> stage, damage and population level
28	Rizzi, UD	46°04'47.00"N 13°12'47.00"E	117	Roadside, parking place in disturbed area 40-50 plants	19 Oct	A, 5, high
29	Udine	46°04'01.00"N 13°12'27.00"E	109	Roadside and sidewalk in urban area 40-50 plants	19 July 22 Aug 7 Oct	No beetles AEL, 2, middle A, 5, high
30	Strada del Mulino, Madriolo, Cividale del Friuli, UD	46°05'55.88"N 13°27'04.52"E	140	Farm road, vineyard and soybean field 40-50 plants	18 Aug	AELP, 1, low
31	Casali Malina, Premariacco, UD	46°02'32.54"N 13°19'10.33"E	86	Farm road along abandoned field 40-50 plants	3 Aug	AELP, 3, middle
32	Paparotti, UD	46°00'46.88"N 13°16'25.36"E	78	Farm road along maize field 40-50 plants	3 Aug	AEP, 2, low
33	Bertiolo, UD	45°57'34.00"N 13°05'35.00"E	41	Parking area near construction yard A few plants	31 July	AE, 2, low
34	Lavariano, Mortegliano, UD	45°57'16.61"N 13°13'09.72"E	45	Parking place along dirt road 10-20 plants	25 Aug	AEP, 4, high
35	Manzano, UD	45°59'00.00"N 13°21'45.00"E	60	Roadside A few plants	28 Aug	LP, 3, middle
36	Pavia di Udine, UD	45°57'35.00"N 13°20'06.00"E	49	Roadside 45-50 plants	28 Aug	AEL, 3, high
37	Castions di Strada, UD	45°55'00.00"N 13°09'44.00"E	23	Roadside A few plants	31 July	AE, 2, low
38	Sant'Andrat del Cormor, Talmassons, UD	45°53'39.00"N 13°09'14.00"E	19	Dirt road 40-50 plants	21 Aug	AEL, 3, low
39**	Gonars, UD	45°53'50.00"N 13°06'40.00"E	20	Roadside, urban area Absence of common ragweed (<i>H. annuus</i>)	26 Aug	– (A, 0, very low)
40	Porpetto, UD	45°51'40.02"N 13°13'02.98"E	7	Roadside 40-50 plants	31 July	AEL, 2, low
41	San Gervasio, Carlino, UD	45°47'55.00"N 13°10'14.00"E	3	Farm road, near maize and soybean fields 10-20 plants	21 Aug	AEL, 3, low
42	San Giorgio di Nogaro, UD	45°49'59.00"N 13°12'52.00"E	4	Urban green area	21 Aug	AEL, 2, low
43	Torviscosa, UD	45°49'39.54"N 13°15'15.07"E	5	Vineyard, inter-rows 40-50 plants	3 Aug	ALP, 4, middle
44	Torviscosa, UD	45°49'45.56"N 13°16'47.19"E	6	Road construction area 40-50 plants	3 Aug	AELP, 4, high
45	Trivignano Udinese, UD	45°57'12.47"N 13°20'22.11"E	46	Farm road, sunflower field 40-50 plants	3 Aug	ALP, 4, high
46	Trivignano Udinese, UD	45°56'14.04"N 13°21'51.61"E	40	Parking area along dirt road 40-50 plants	3 Aug	ALP, 3, low

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(Table S1 continued)

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47	Palmanova, UD	45°54'49.96"N 13°18'36.73"E	28	Farm road, maize field 40-50 plants	8 Aug	AELP, 4, middle
48	Palmanova, UD	45°54'37.00"N 13°18'44.00"E	25	Roadside, suburban green area A few plants	30 July	A, 3, middle
49	Palmanova, UD	45°54'16.00"N 13°19'02.00"E	25	Roadside, suburban green area A few plants	30 July	A, 3, middle
50	Visco, UD	45°53'09.60"N 13°21'00.11"E	20	Farm road, sunflower field 40-50 plants	3 Aug	AELP, 3, high
51	Villesse, GO	45°51'58.25"N 13°25'39.47"E	17	Abandoned area near a shopping centre 40-50 plants	28 July 13 Oct	AELP, 4, high A, 5, high
52	San Quirino, Cormons, GO	45°57'07.00"N 13°27'16.00"E	50	Vineyard 40-50 plants	25 July	AELP, 3, high
53	San Quirino, Cormons, GO	45°56'36.00"N 13°27'07.00"E	44	Uncultivated area overgrown with weeds More than 100 plants	14 Oct	A, 5, high
54	San Quirino, Cormons, GO	45°56'30.00"N 13°27'11.00"E	42	Uncultivated area overgrown with weeds 40-50 plants	25 July	AELP, 3, high
55	Monticello, Cormons, GO	45°56'00.29"N 13°28'50.79"E	38	Farm road near a vineyard 40-50 plants	26 Aug	LP, 3, middle
56	Mariano del Friuli, GO	45°55'08.42"N 13°28'03.72"E	35	Roadside A few plants	28 July	AELP, 2, low
57	Mossa, GO	45°56'01.63"N 13°32'28.37"E	56	Roadside 10-20 plants	18 Aug	AELP, 3, high
58	Gorizia	45°56'42.62"N 13°35'58.37"E	46	Roadside, abandoned waste area 40-50 plants	18 Aug	AELP, 3, high
59	Lisert, Canale Locovaz, Monfalcone, GO	45°47'15.81"N 13°34'43.60"E	4	Parking area along dirt road 40-50 plants	8 Sept	AELP, 2, middle
60**	Villaggio del Pescatore, -Aurisina, TS	45°46'37.26"N 13°35'21.67"E	14	Roadside Absence of common ragweed (<i>E. canadensis</i>)	8 Sept	– (A, 2, middle)
61	Villaggio del Pescatore, Duino-Aurisina, TS	45°46'51.72"N 13°35'37.15"E	19	Roadside, area overgrown with weeds 10-20 plants	8 Sept	AELP, 1, low
62	Sistiana, Duino-Aurisina, TS	45°45'43.71"N 13°38'22.16"E	76	Parking area along road A few plants	8 Sept	EL, 1, low
63	Basovizza, TS	45°37'58.42"N 13°53'07.77"E	460	Roadside 10-20 plants	6 Sept	AE, 1, low
(64-66) Western Slovenia, Gorizia region						
64	Anhovo, Kanal ob Soči	46°03'21.43"N 13°37'33.77"E	93	Roadside, parking site near construction yard 40-50 plants	18 Aug	AELP, 3, high
65	Vrtojba, Šempeter-Vrtojba	45°54'26.04"N 13°37'36.67"E	59	Degraded area, construction yard 40-50 plants	18 Aug	AELP, 2, middle

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(Table S1 continued)

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66	Bilje, Miren-Kostanjevica	45°53'47.00"N 13°38'44.67"E	49	Degraded area, road construction yard 40-50 plants	18 Aug	AELP, 2, middle
(67-70) Western Slovenia, Coastal-Karst region						
67	Kozina, Hrpelje-Kozina	45°36'30.32"N 13°56'00.97"E	486	Parking area near a shopping centre 10-20 plants	3 Aug	No beetles
68	Kozina, Hrpelje-Kozina	45°36'34.23"N 13°55'38.79"E	499	Roadside 10-20 plants	6 Sept	AEL, 1, low
69	Tublje pri Hrpeljah, Hrpelje-Kozina	45°35'38.49"N 13°58'27.02"E	498	Roadside 10-20 plants	6 Sept	E, 0, very low
70	Gradišče pri Materiji, Hrpelje-Kozina	45°33'03.69"N 14°03'29.48"E	586	Roadside 10-20 plants	6 Sept	E, 1, very low
(71-72) Western Slovenia, Inner-Karniola Karst region						
71	Starod, Ilirska Bistrica	45°29'33.79"N 14°12'00.75"E	662	Abandoned rest area on the border with Italy 10-20 plants	6 Sept	A, 0, very low
72	Starod, Ilirska Bistrica	45°29'36.33"N 14°12'37.53"E	611	Parking area along roadside 10-20 plants	3 Aug	No beetles
(73-79) North-western Croatia, Primorje-Gorski Kotar County						
73	Pasjak, Matulji	45°28'56.84"N 14°14'21.22"E	485	Roadside 40-50 plants	6 Sept	E, 0, very low
74	Šapjane, Matulji	45°28'50.52"N 14°15'16.03"E	416	Roadside 40-50 plants	3 Aug	No beetles
75	Rupa, Matulji	45°28'11.97"N 14°17'05.72"E	440	Roadside 40-50 plants	6 Sept	E, 0, very low
76	Rupa, Matulji	45°27'08.46"N 14°16'56.59"E	438	Roadside 40-50 plants	6 Sept	E, 1, very low
77	Permani, Matulji	45°25'48.68"N 14°17'44.20"E	381	Parking area along roadside 40-50 plants	6 Sept	A, 1, very low
78	Srdoči, Rijeka	45°21'19.66"N 14°21'59.76"E	218	Resting place in the suburban area A few plants	6 Sept	No beetles
79	Rijeka	45°19'53.33"N 14°25'33.73"E	10	Flowerbed along city avenue A few plants	14 Oct	No beetles