

1 **Tables**

2 **Tab. S1.** Inventory of vascular plants containing habitat preferences and species occurrence for
 3 each zone of the wasteland site. No rare or endangered species were reported.

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5 Species rarity: FC=Fairly Common C=Common CC=Highly Common CCC=Extremely Common.

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HABITAT PREFERENCES	GENERA AND SPECIES	RARITY	ZONE
Calcareous lawns	<i>Brachypodium rupestre</i> (Host) Roem. & Schult., 1817	C	Zone 2
Calcareous lawns	<i>Bromopsis erecta</i> subsp. <i>erecta</i> (Huds.) Fourr., 1869	CC	Zone 3
Calcareous lawns	cf. <i>Gymnadenia conopsea</i> (L.) R.Br., 1813	FC	Zone 1, 2
Crops	<i>Capsella bursa-pastoris</i> (L.) Medik., 1792	CC	Zone 3
Crops	<i>Ervilia hirsuta</i> (L.) Opiz, 1852	CC	Zone 1, 2, 3
Crops	<i>Lathyrus tuberosus</i> L., 1753	CC	Zone 2
Crops	<i>Sonchus asper</i> subsp. <i>asper</i> (L.) Hill, 1769	CC	Zone 3
Eutrophic wet grasslands	<i>Carex hirta</i> L., 1753	CC	Zone 2
Megaphorbiets	<i>Convolvulus sepium</i> L., 1753	CC	Zone 2
Mesophilic calcareous edges	<i>Agrimonia eupatoria</i> L., 1753	CC	Zone 1, 2
Mesophilic calcareous edges	<i>Galium album</i> Mill., 1768	CC	Zone 1, 2, 3
Mesophilic calcareous edges	<i>Inula conyza</i> DC., 1836	C	Zone 2, 3
Mesophilic calcareous edges	<i>Origanum vulgare</i> subsp. <i>vulgare</i> L., 1753	CC	Zone 1, 2, 3
Mesophilic grasslands	<i>Achillea millefolium</i> L., 1753	CC	Zone 1
Mesophilic grasslands	<i>Arrhenatherum elatius</i> (L.) P.Beauv. ex J. Presl & C.Presl, 1819	CC	Zone 1, 2, 3
Mesophilic grasslands	<i>Dactylis glomerata</i> L., 1753	CC	Zone 1, 2, 3
Mesophilic grasslands	<i>Heracleum sphondylium</i> L., 1753	CC	Zone 1, 3
Mesophilic grasslands	<i>Jacobaea vulgaris</i> subsp. <i>vulgaris</i> Gaertn.,1791	CC	Zone 1, 2
Mesophilic grasslands	<i>Medicago lupulina</i> L., 1753	CC	Zone 1, 2
Mesophilic grasslands	<i>Plantago lanceolata</i> L., 1753	CC	Zone 1, 2, 3
Mesophilic grasslands	<i>Poa pratensis</i> L., 1753	CC	Zone 1, 2, 3
Mesophilic grasslands	<i>Schedonorus pratensis</i> (Huds.) P.Beauv., 1812	CC	Zone 3
Mesophilic grasslands	<i>Tragopogon pratensis</i> L., 1753	CC	Zone 3
Mesophilic grasslands	<i>Vicia segetalis</i> Thuill., 1799	C	Zone 1, 2
Nitrophilic hems	<i>Epilobium montanum</i> L., 1753	CC	Zone 2
Nitrophilic hems	<i>Euphorbia stricta</i> L., 1759	C	Zone 3
Nitrophilic hems	<i>Galium aparine</i> L., 1753	CC	Zone 3
Nitrophilic hems	<i>Glechoma hederacea</i> L., 1753	CC	Zone 3
Nitrophilic hems	<i>Torilis japonica</i> (Houtt.) DC., 1830	CC	Zone 1
Nitrophilic hems	<i>Urtica dioica</i> L., 1753	CCC	Zone 1, 2, 3
Reed bed and sedge meadows	<i>Carex acutiformis</i> Ehrh., 1789	CC	Zone 2
Ruderal gramineae vegetations	<i>Elytrigia repens</i> subsp. <i>repens</i> (L.) Desv. ex Nevski, 1934	CC	Zone 1, 2, 3
Thickets	<i>Cornus sanguinea</i> L., 1753	CC	Zone 2
Thickets	<i>Crataegus monogyna</i> Jacq., 1775	CC	Zone 3
Thickets	<i>Hedera helix</i> L., 1753	CC	Zone 2
Thickets	<i>Prunus spinosa</i> L., 1753	CC	Zone 1, 2, 3
Thickets	<i>Rosa canina</i> L., 1753	CC	Zone 3
Wastelands	<i>Artemisia vulgaris</i> L., 1753	CC	Zone 1, 3
Wastelands	<i>Cirsium arvense</i> (L.) Scop., 1722	CC	Zone 1, 2, 3
Wastelands	<i>Cirsium vulgare</i> subsp. <i>vulgare</i> (Savi) Ten., 1838	CC	Zone 3
Wastelands	<i>Daucus carota</i> L., 1753	CC	Zone 1, 3
Wastelands	<i>Dipsacus fullonum</i> L., 1753	CC	Zone 2, 3
Wastelands	<i>Hypericum perforatum</i> var. <i>perforatum</i> L., 1753	CC	Zone 1, 2, 3
Wastelands	<i>Linaria vulgaris</i> Mill., 1768	CC	Zone 1
Wastelands	<i>Pastinaca sativa</i> subsp. <i>urens</i> (Req. ex Godr.) Celak., 1875	C	Zone 1, 2, 3
Wastelands	<i>Silene latifolia</i> subsp. <i>alba</i> (Mill.) Greuter & Burdet, 1982	CC	Zone 3
Wastelands	<i>Trigonella alba</i> (Medik.) Coulot & Rabaute, 2013	C	Zone 1, 2, 3
Other species	<i>Acer pseudoplatanus</i> L., 1753	CC	Zone 2
Other species	<i>Fraxinus excelsior</i> L., 1753	CC	Zone 1, 2
Other species	<i>Lathyrus latifolius</i> L., 1753	FC	Zone 3
Other species	<i>Malus sylvestris</i> Mill., 1768	C	Zone 1, 3
Other species	<i>Parthenocissus inserta</i> (A.Kern.) Fritsch, 1922	C	Zone 1, 3
Other species	<i>Potentilla reptans</i> L., 1753	CC	Zone 1, 2, 3
Other species	<i>Rubus fruticosus</i> group	-	Zone 1, 2, 3

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9 **Tab. S2.** Inventory of Orthoptera and diurnal Lepidoptera communities containing species
 10 occurrence and abundances for each zone of the wasteland site. No rare or endangered species
 11 were reported. The size of Orthoptera and diurnal Lepidoptera communities was assessed by
 12 semi-abundance coefficients: - was for one specimen, + was for two to five specimens, ++ was
 13 for six to twelve specimens, +++ was assigned when a species reached at least thirteen
 14 specimens.

ORDER	GENERA AND SPECIES	SEMI-ABUNDANCES			
		ZONE 1	ZONE 2	ZONE 3	SITE
LEPIDOPTERA	<i>Araschnia levana</i> Linnaeus, 1758			-	-
	<i>Argynnis paphia</i> Linnaeus, 1758	-		+	+
	<i>Colias hyale</i> or <i>alfacariensis</i> Ribbe, 1905			+	+
	<i>Cupido argiades</i> Pallas, 1771	-			-
	<i>Gonepteryx rhamni</i> Linnaeus, 1758	-		++	++
	<i>Macroglossum stellatarum</i> Linnaeus, 1758			-	-
	<i>Maniola jurtina</i> Linnaeus, 1758			-	-
	<i>Melanargia galathea</i> Linnaeus, 1758	-	-	-	-
	<i>Ochlodes sylvanus</i> Esper, 1777			-	-
	<i>Pieris rapae</i> Linnaeus, 1758	+	++	+++	+++
	<i>Pyronia tithonus</i> Linnaeus, 1771	+++	+++	+++	+++
	<i>Polygonia c-album</i> Linnaeus, 1758			-	-
<i>Polyommatus icarus</i> Rottemburg, 1775			-	-	
ORTHOPTERA	<i>Bicolorana bicolor</i> Philippi, 1830	+++	++	+	+++
	<i>Chorthippus brunneus</i> Thunberg, 1815		+		+
	<i>Chrysochraon dispar</i> Germar, 1834	-	+		+
	<i>Gomphocerippus rufus</i> Linnaeus, 1758	++	+	++	++
	<i>Oedipoda caerulescens</i> Linnaeus, 1758		-		-
	<i>Phaneroptera falcata</i> Poda, 1761	-	+	-	+
	<i>Pseudochorthippus parallelus</i> Zetterstedt, 1821	-			-
	<i>Tettigonia viridissima</i> Linnaeus, 1758	-			-

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17 **Tab. S3.** Threshold values of the local geochemical background (Saby et al., 2018).

Pseudo-total MTE	As	Cd	Co	Cr	Cu	Ni	Pb	Zn
Vibriss ¹ (mg kg ⁻¹)	57.0 - 70.8	1.5	26.0	130	29.8	78.6	61.5	234
SSL ² (=Vibriss*3)	171 – 212	4.5	78.1	391	89.5	236	184	703

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 19 ¹ Vibriss: threshold value corresponding to the background level in the region considered for the study. ² Soil
 20 Screening Level: for trace metal contamination limit criteria, it is commonly accepted to use a value three times
 21 greater than the vibriss threshold. When soil trace metal contents are above the SSL, the exposure level is
 22 considered to have a significant impact on soil quality.

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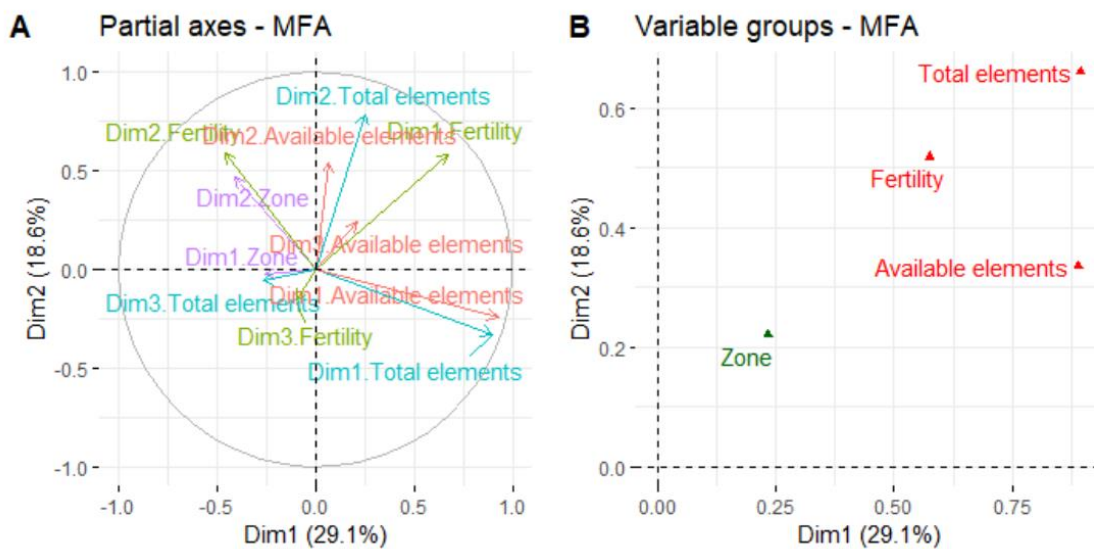
24 **Figures**



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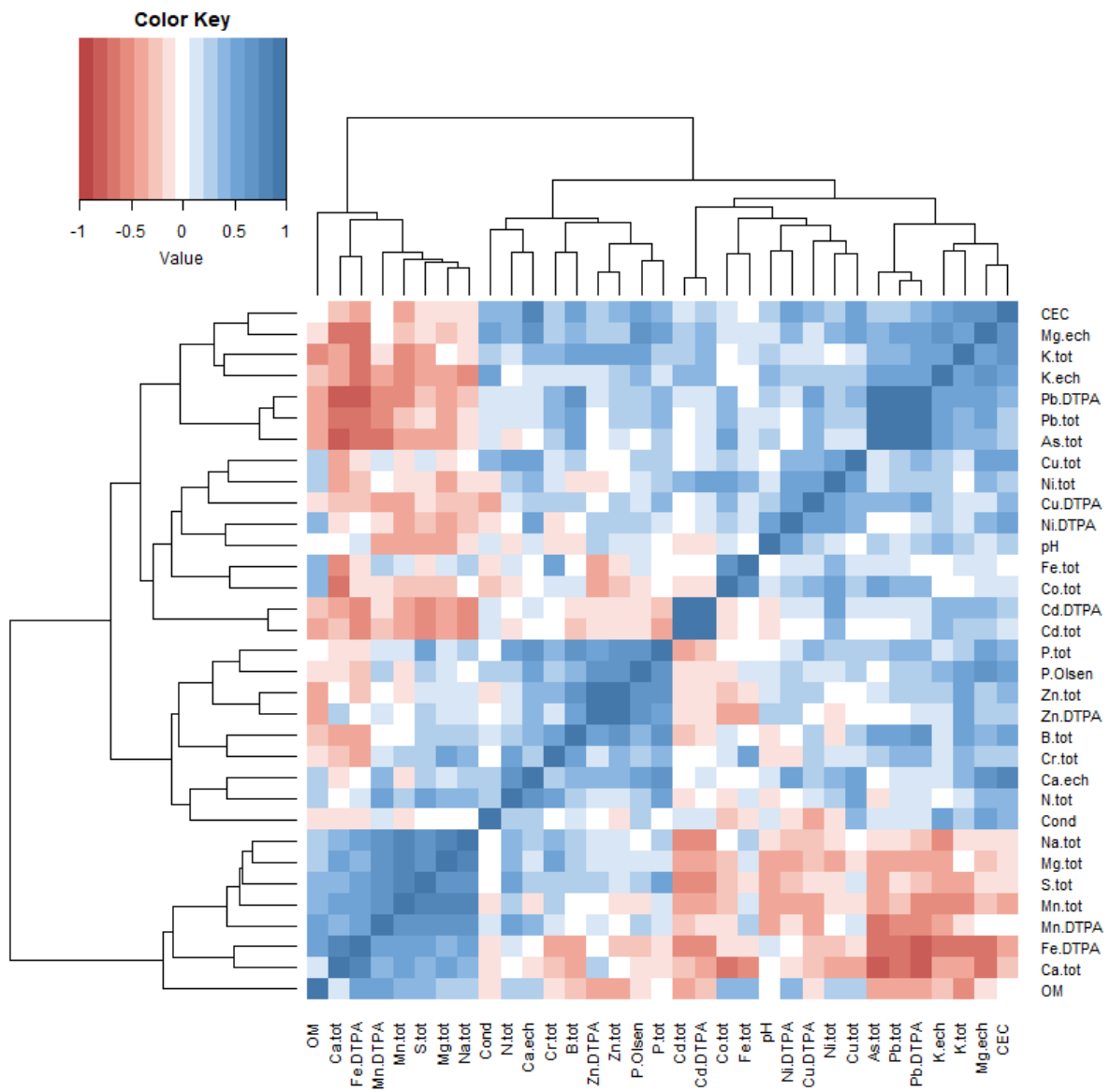
27 **Fig. S1.** Wasteland of the glass industry characterized by a well-vegetated ecosystem. Southern
28 view taken in July 2019.

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31 **Fig. S2.** Multiple-factor analysis (MFA) performed on abiotic parameters in the topsoils. A.
32 Representation of the variable groups on the factorial map.



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35 **Fig. S3.** Heatmap of the Spearman's correlation coefficients between abiotic parameters in the

36 topsoils with clustering on the variables.