

Table S1. Matching information and rates of insect herbivore host plant and vascular plant flora of the sites

Terrestrial herbivorous insects	Host plants referred	<i>Chenopodium album</i> 20	<i>Beckmannia syzigachne</i> 2020	<i>Beckmannia syzigachne</i> 2021	<i>Artemisia indica</i> 2020	<i>Artemisia indica</i> 2021
<i>Cardipennis sulcithorax</i> (Hustache, 1916)	<i>Humulus japonicus</i> [44]	0	3	0	6	0
<i>Psallus</i> (<i>Calopsallus</i>) <i>clarus</i> Kerzhner, 1988	<i>Quercus dentata</i> [41]	0	0	0	1	0
<i>Dryodurgades lamellaris</i> Vilbaste, 1968	<i>Pteridium aquilinum</i> var. <i>latiusculum</i> and <i>Pueraria lobata</i> [59]	0	0	0	0	4
Tephritidae sp.	unknown	0	0	1	0	0
<i>Metalimnus steini</i> (Fieber, 1869)	unknown	0	0	1	0	0
<i>Corythucha marmorata</i> Uhler, 1878	polyphagy [55]	0	1	3	0	58
<i>Ziczacella steggerdai</i> (Ross, 1965)	<i>Humulus japonicus</i> [53]	0	11	3	0	0
<i>Eucera</i> (<i>Eucera</i>) <i>sociabilis</i> (Smith, 1873)	Assumed polyphagy	0	0	0	0	1
<i>Stigmatonotum rufipes</i> (Motschulsky, 1866)	Collected on <i>Hypericum japonicum</i> [62]	0	1	0	0	1
<i>Macrosteles brunnescens</i> Anufriev, 1968	unknown	0	0	0	0	10
<i>Acanthocoris sordidus</i> (Thunberg, 1783)	Solanaceae and Convolvulaceae [41]	0	0	0	0	2
Apidae sp.	assumed polyphagy	0	0	0	0	1
<i>Agapanthia</i> (<i>Epopetes</i>) <i>amurensis</i> Kraatz, 1879	Asteraceae [59]	0	0	0	0	1
<i>Cassida nebulosa</i> Linnaeus, 1758	<i>Chenopodium album</i> , <i>Chenopodium album</i> var. <i>centrorubrum</i> [42]	2	0	0	0	0
<i>Goniagnathus</i> (<i>Epitephra</i>) <i>rugulosus</i> (Haupt, 1917)	unknown	0	0	0	1	2
<i>Polymerus</i> (<i>Polymerus</i>) <i>amurensis</i> Kerzhner, 1988	unknown	0	5	0	0	0
<i>Austroasca vittata</i> (Lethierry, 1884)	Genus <i>Artemisia</i> [58]	0	0	0	776	625
<i>Plagiognathus yomogi</i> Miyamoto, 1969	<i>Artemisia indica</i> [41]	0	0	0	0	31
<i>Pachygrontha antennata</i> (Uhler, 1860)	Poaceae [41]	1	0	0	0	1
<i>Orthezia urticae</i> (Linnaeus, 1758)	Asteraceae [59]	0	0	0	29	0
<i>Eysarcoris gibbosus</i> Jakovlev, 1904	<i>Leonurus japonicus</i> [41]	0	0	1	0	0
<i>Nakaharanus sagittarius</i> Kwon and Lee, 1979	unknown	0	0	0	0	3
<i>Galerucella</i> (<i>Galerucella</i>) <i>grisea</i> (Joannis, 1865)	<i>Persicaria thunbergii</i> , <i>Rumex crispus</i> , Genus <i>Persicaria</i> [42]	1	0	0	0	0

<i>Cicadella viridis</i> (Linnaeus, 1758)	Polyphagy [59]	0	0	0	0	1
Cicadellidae sp. 1	unknown	0	0	0	0	25
Cicadellidae sp. 2	unknown	0	0	0	0	2
Cicadellidae sp. 3	unknown	0	0	0	0	1
Cicadellidae sp. 4	unknown	0	0	3	0	0
Cicadellidae sp. 5	unknown	0	0	2	0	0
<i>Piesma capitatum</i> (Wolff, 1804)	Other <i>Piesma</i> species' host is Chenopodiaceae [53]	16	0	0	0	0
<i>Orthotylus flavosparsus</i> (Sahlberg, 1841)	Chenopodiaceae [41]	83	5	0	0	0
<i>Dorytomus (Dorytomus) imbecillus</i> Faust, 1883	Genus <i>Salix</i> [59]	0	17	29	0	0
<i>Plagiognathus amurensis</i> Reuter, 1883	Polyphagy [41]	23	28	1	18	0
<i>Europiella artemisiae</i> (Becker, 1864)	<i>Artemisia indica</i> [41]	0	1	0	207	419
<i>Taylorilygus apicalis</i> (Fieber, 1861)	Polyphagy but prefer Asteraceae [41]	0	0	0	0	12
<i>Lema (Lema) concinnipennis</i> Baly, 1865	<i>Commelina communis</i> [42]	0	1	0	0	0
<i>Plagiodera versicolora</i> (Laicharting, 1781)	<i>Salix koreensis</i> [42]	0	0	2	0	0
<i>Chrysomela vigintipunctata vigintipunctata</i> (Scopoli, 1763)	<i>Salix koreensis</i> [42]	0	0	1	0	0
Chrysomelidae sp.	unknown	0	0	3	0	17
<i>Lissorhoptrus oryzophilus</i> Kuschel, 1952	Poaceae, Cyperaceae [56]	0	1	0	0	1
<i>Chlorops oryzae</i> Matsumura, 1915	Poaceae [63]	0	10	8	0	45
<i>Geotomus convexus</i> Hsiao, 1977	Assumed polyphagy	0	0	1	0	0
<i>Dorytomus (Dorytomus) roelofsi</i> Faust, 1882	Genus <i>Salix</i> [45]	0	0	1	0	0
<i>Rhopalus (Aeschyntelus) maculatus</i> (Fieber, 1837)	Polyphagy [41]	0	0	0	1	0
<i>Fleutiauxia armata</i> (Baly, 1874)	<i>Cudrania tricuspidata</i> [42]	0	1	0	0	0
<i>Cletus punctiger</i> (Dallas, 1852)	Polyphagy [41]	1	0	0	0	0
<i>Chrysolina (Anopachys) aurichalcea</i> (Mannerheim, 1825)	<i>Artemisia indica</i> [42]	0	0	0	0	1
<i>Cosmobaris scolopacea</i> (Germar, 1819)	Chenopodiaceae [51]	0	0	0	0	1
<i>Crepidodera plutus</i> (Latreille, 1804)	Genus <i>Salix</i> [43]	0	1	1	0	0
<i>Hypera (Hypera) postica</i> (Gyllenhal, 1813)	Fabaceae [50]	0	0	0	1	0
<i>Orthocephalus funestus</i> Jakovlev, 1881	<i>Artemisia indica</i> [41]	0	0	0	3	10

<i>Nysius hidakai</i> Nakatani, 2015	Other <i>Nysius</i> species usually use Asteraceae as a host [41]	3	0	0	51	0
<i>Cassida piperata</i> Hope, 1842	<i>Achyranthes bidentata</i> var. <i>japonica</i> , <i>Chenopodium album</i> var. <i>centrorubrum</i> , <i>Amaranthus lividus</i> , <i>Commelina communis</i> [43]	2	0	0	0	0
<i>Apolygus spinolae</i> (Meyer-Dür, 1841)	Polyphagy [41]	0	0	0	7	2
<i>Apis mellifera</i> Linnaeus, 1758	Assumed polyphagy	0	0	0	0	2
<i>Dimorphopterus japonicus</i> (Hidaka, 1959)	<i>Miscanthus sinensis</i> var. <i>purpurascens</i> , <i>Phragmites japonica</i> [41]	0	0	0	0	1
<i>Deraeocoris</i> (<i>Camptobrochis</i>) <i>pulchellus</i> (Reuter, 1906)	<i>Artemisia indica</i> and <i>Erigeron annuus</i> ([41]	0	0	0	3	2
<i>Ceutorhynchus</i> (<i>Ceutorhynchus</i>) <i>albosuturalis</i> (Roelofs, 1875)	Brassicaceae [57, 44]	68	1	0	0	0
<i>Heteraspis lewisii</i> Baly, 1874	<i>Ampelopsis brevipedunculata</i> , <i>Vitis coignetiae</i> , <i>Parthenocissus tricuspidata</i> [43]	0	0	0	0	3
Tenthredinidae sp.	unknown	0	0	1	0	0
<i>Gastrophysa atrocyanea</i> Motschulsky, 1860	<i>Rumex crispus</i> and <i>Rumex japonicus</i> [12]	0	1	0	0	1
<i>Luprops orientalis</i> (Motschulsky, 1868)	Other genus <i>Luprops</i> species exhibit polyphagy [64]	0	0	1	0	0
<i>Capsus cinctus</i> (Kolenati, 1845)	Recorded hosts are <i>Eleusine indica</i> and Genus <i>Calamagrostis</i> so Poaceae assumed as a host [54, 60]	0	107	188	0	1
Apionidae sp.	unknown	0	0	1	0	0
<i>Apolygus lucorum</i> (Meyer-Dür, 1843)	Polyphagy but generally found on <i>Artemisia indica</i> [61, 41]	1	0	0	32	48
<i>Ceutorhynchus</i> (<i>Ceutorhynchus</i>) <i>filiae</i> Dalla Torre, 1922	Brassicaceae [57, 44]	0	0	0	2	0
<i>Metasalis populi</i> (Takeya, 1932)	Genus <i>poplar</i> , <i>Platanus</i> , <i>Salix</i> , <i>Populus</i> [41]	0	3	0	0	0
<i>Nezara antennata</i> Scott, 1874	Polyphagy but prefer Fabaceae [41]	0	1	0	0	0
<i>Psylliodes</i> (<i>Psylliodes</i>) <i>attenuata</i> (Koch, 1803)	<i>Humulus japonicus</i> [48]	199	257	0	8	0
<i>Stenodema calcarata</i> (Fallén, 1807)	Poaceae and Cyperaceae [41]	0	3	1	0	0
<i>Psilarthroides czerskyi</i> (Zaslavskij, 1956)	<i>Humulus japonicus</i> [44]	0	6	0	0	3
<i>Cardipennis shaowuensis</i> (Voss, 1958)	<i>Humulus japonicus</i> [44]	2	6	0	0	0
Matching rate		100	82.6	66.7	87.5	66.7

Table S2. Vascular plant flora of Miho river by each plant species community

Plant species	2020 <i>C. album</i>	2020 <i>B. syzigachne</i>	2021 <i>B. syzigachne</i>	2020 A. <i>indica</i>	2021 A. <i>indica</i>
<i>Equisetum arvense</i> L.		1	1	1	1
<i>Salix koreensis</i> Andersson		1	1		
<i>Morus alba</i> L.					1
<i>Humulus japonicus</i> Sieboid & Zucc.	1	1	1		1
<i>Persicaria lapathifolia</i> (L.) Gray	1				
<i>Rumex crispus</i> L.		1	1	1	1
<i>Arenaria serpyllifolia</i> L.					1
<i>Stellaria alsine</i> var. <i>undulata</i> (Thunb.) Ohwi	1				
<i>Humulus japonicus</i> Sieboid & Zucc.	1	1	1		1
<i>Persicaria lapathifolia</i> (L.) Gray	1				
<i>Rumex crispus</i> L.		1	1	1	1
<i>Arenaria serpyllifolia</i> L.					1
<i>Stellaria alsine</i> var. <i>undulata</i> (Thunb.) Ohwi	1				
<i>Stellaria aquatica</i> (L.) Scop.			1		
<i>Stellaria media</i> (L.) Vill.		1			
<i>Chenopodium album</i> L.	1		1		1
<i>Chenopodium album</i> var. <i>centrorubrum</i> Makino		1		1	
<i>Chenopodium bryoniaefolium</i> Bunge	1				
<i>Chenopodium ficifolium</i> Smith	1				
<i>Chenopodium glaucum</i> L.	1				
<i>Ranunculus sceleratus</i> L.	1				
<i>Menispermum dauricum</i> DC.			1		
<i>Chelidonium majus</i> var. <i>asiaticum</i> (Hara) Ohwi		1	1	1	1
<i>Papaver rhoeas</i> L.				1	
<i>Barbarea orthoceras</i> Ledeb.	1				
<i>Brassica napus</i> L.	1				
<i>Capsella bursapastoris</i> (L.) L.W.Medicus	1	1			
<i>Cardamine flexuosa</i> With.	1				
<i>Descurainia pinnata</i> Britton	1				
<i>Descurainia sophia</i> (L.) Webb ex Prantl	1				
<i>Draba nemorosa</i> L.	1				
<i>Lepidium sativum</i> L.				1	
<i>Lepidium virginicum</i> L.				1	
<i>Rorippa palustris</i> (Leyss.) Besser	1		1		
<i>Thlaspi arvense</i> L.	1	1	1		
<i>Potentilla supina</i> L.	1				
<i>Vicia amoena</i> Fisch. ex DC.				1	
<i>Vicia angustifolia</i> var. <i>segetilis</i> (Thuill.) K.Koch.				1	1
<i>Vicia villosa</i> Roth					1

<i>Oenothera biennis</i> L.			1	1
<i>Anthriscus sylvestris</i> (L.) Hoffm.		1		
<i>Anthriscus sylvestris</i> var. <i>hirtifructus</i> (Ohwi) Hara	1			
<i>Oenanthe javanica</i> (Blume) DC.		1		
<i>Galium spurium</i> var. <i>echinospermon</i> (Wallr.) Hayek	1	1		1
<i>Trigonotis peduncularis</i> (Trevir.) Benth. ex Hemsl.	1	1		
<i>Lamium amplexicaule</i> L.	1			
<i>Leonurus japonicus</i> Houtt.	1			
<i>Scutellaria indica</i> L.			1	
<i>Mazus pumilus</i> (Burm.f.) Steenis		1		
<i>Veronica arvensis</i> L.	1			
<i>Veronica peregrina</i> L.	1			
<i>Veronica undulata</i> Wall.	1			
<i>Ambrosia artemisiifolia</i> L.	1			
<i>Artemisia indica</i> Willd.	1		1	1
<i>Artemisia selengensis</i> Turcz. ex Besser		1		
<i>Coreopsis lanceolata</i> L.				1
<i>Erigeron annuus</i> (L.) Pers.	1	1		1
<i>Hemistepta lyrata</i> Bunge		1	1	1
<i>Ixeris polycephala</i> Cass.			1	1
<i>Taraxacum officinale</i> Weber			1	
<i>Youngia japonica</i> (L.) DC.		1		
<i>Agrostis dimorpholemma</i> Ohwi				1
<i>Alopecurus aequalis</i> Sobol.	1	1		
<i>Beckmannia syzigachne</i> (Steud.) Fernald	1	1		
<i>Bromus japonicus</i> Thunb.		1		1
<i>Miscanthus sinensis</i> var. <i>purpurascens</i> (Andersson) Rendle	1			
<i>Phragmites communis</i> Trin.	1			
<i>Phragmites japonica</i> Steud.	1			1
<i>Poa pratensis</i> L.	1			
<i>Carex aphanolepis</i> Franch. & Sav.			1	
<i>Carex breviculmis</i> R.Br.	1			
<i>Carex glabrescens</i> Ohwi	1		1	
<i>Carex miyabei</i> Franch.	1		1	
<i>Stellaria aquatica</i> (L.) Scop.		1		
<i>Stellaria media</i> (L.) Vill.	1			
<i>Chenopodium album</i> L.	1	1		1
<i>Chenopodium album</i> var. <i>centrorubrum</i> Makino	1		1	
<i>Chenopodium bryoniaefolium</i> Bunge	1			
<i>Chenopodium ficifolium</i> Smith	1			
<i>Chenopodium glaucum</i> L.	1			
<i>Ranunculus sceleratus</i> L.	1			

<i>Menispermum dauricum</i> DC.			1		
<i>Chelidonium majus</i> var. <i>asiaticum</i> (Hara) Ohwi	1		1	1	1
<i>Papaver rhoeas</i> L.				1	
<i>Barbarea orthoceras</i> Ledeb.	1				
<i>Brassica napus</i> L.	1				
<i>Capsella bursapastoris</i> (L.) L.W.Medicus	1	1			
<i>Cardamine flexuosa</i> With.	1				
<i>Descurainia pinnata</i> Britton	1				
<i>Descurainia sophia</i> (L.) Webb ex Prantl	1				
<i>Draba nemorosa</i> L.	1				
<i>Lepidium sativum</i> L.				1	
<i>Lepidium virginicum</i> L.				1	
<i>Rorippa palustris</i> (Leyss.) Besser	1		1		
<i>Thlaspi arvense</i> L.	1	1	1		
<i>Potentilla supina</i> L.	1				
<i>Vicia amoena</i> Fisch. ex DC.				1	
<i>Vicia angustifolia</i> var. <i>segetilis</i> (Thuill.) K.Koch.				1	1
<i>Vicia villosa</i> Roth					1
<i>Oenothera biennis</i> L.				1	1
<i>Anthriscus sylvestris</i> (L.) Hoffm.			1		
<i>Anthriscus sylvestris</i> var. <i>hirtifructus</i> (Ohwi) Hara	1				
<i>Oenanthe javanica</i> (Blume) DC.			1		
<i>Galium spurium</i> var. <i>echinospermon</i> (Wallr.) Hayek		1	1		1
<i>Trigonotis peduncularis</i> (Trevir.) Benth. ex Hemsl.	1		1		
<i>Lamium amplexicaule</i> L.	1				
<i>Leonurus japonicus</i> Houtt.		1			
<i>Scutellaria indica</i> L.				1	
<i>Mazus pumilus</i> (Burm.f.) Steenis			1		
<i>Veronica arvensis</i> L.	1				
<i>Veronica peregrina</i> L.	1				
<i>Veronica undulata</i> Wall.	1				
<i>Ambrosia artemisiifolia</i> L.	1				
<i>Artemisia indica</i> Willd.		1		1	1
<i>Artemisia selengensis</i> Turcz. ex Besser			1		
<i>Coreopsis lanceolata</i> L.					1
<i>Erigeron annuus</i> (L.) Pers.	1		1		1
<i>Hemistepta lyrata</i> Bunge			1	1	1
<i>Ixeris polycephala</i> Cass.				1	1
<i>Taraxacum officinale</i> Weber				1	
<i>Youngia japonica</i> (L.) DC.			1		
<i>Agrostis dimorpholemma</i> Ohwi					1
<i>Alopecurus aequalis</i> Sobol.	1		1		
<i>Beckmannia syzigachne</i> (Steud.) Fernald		1	1		

<i>Bromus japonicus</i> Thunb.		1		1
<i>Miscanthus sinensis</i> var. <i>purpurascens</i> (Andersson)				
Rendle	1			
<i>Phragmites communis</i> Trin.		1		
<i>Phragmites japonica</i> Steud.	1			1
<i>Poa pratensis</i> L.		1		
<i>Carex aphanolepis</i> Franch. & Sav.			1	
<i>Carex breviculmis</i> R.Br.		1		
<i>Carex glabrescens</i> Ohwi		1	1	
<i>Carex miyabei</i> Franch.		1	1	
<i>Carex neurocarpa</i> Maxim.				1

Table S3. Insect fauna of Miho river by each plant species community

Insect species	2020 <i>C. album</i>	2020 <i>B. syzigachne</i>	2021 <i>B. syzigachne</i>	2020 <i>A.</i> <i>indica</i>	2021 <i>A.</i> <i>indica</i>
<i>Stricticollis valgipes</i> (Marseul, 1875)					6
Apionidae sp.			1		
<i>Cantharis</i> (<i>Cyrtomoptila</i>) <i>plagiata</i> Heyden, 1889	5	38	7	20	35
<i>Chlaenius</i> (<i>Lissauchenius</i>) <i>naeviger</i> Morawitz, 1862					1
<i>Agapanthia</i> (<i>Epoetes</i>) <i>amurensis</i> Kraatz, 1879					1
<i>Cassida nebulosa</i> Linnaeus, 1758	2				
<i>Cassida piperata</i> Hope, 1842	2				
<i>Chrysolina</i> (<i>Anopachys</i>) <i>aurichalcea</i> (Mannerheim, 1825)					1
<i>Chrysomela vigintipunctata</i> (Scopoli, 1763)			1		
Chrysomelidae sp.			3		17
<i>Crepidodera plutus</i> (Latreille, 1804)		1	1		
<i>Fleutiauxia armata</i> (Baly, 1874)		1			
<i>Galerucella</i> (<i>Galerucella</i>) <i>grisea</i> (Joannis, 1865)	1				
<i>Gastrophysa atrocyanea</i> Motschulsky, 1860		1			1
<i>Heteraspis lewisii</i> Baly, 1874					3
<i>Lema</i> (<i>Lema</i>) <i>concinnipennis</i> Baly, 1865		1			
<i>Plagiodera versicolora</i> (Laicharting, 1781)			2		
<i>Psylliodes</i> (<i>Psylliodes</i>) <i>attenuata</i> (Koch, 1803)	199	257		8	
<i>Calvia mui</i> (Timberlake, 1943)			2		
<i>Harmonia axyridis</i> (Pallas, 1773)				1	
<i>Hippodamia</i> (<i>Hemisphaerica</i>) <i>tredecimpunctata</i> (Linnaeus, 1758)	1				
<i>Nephus</i> (<i>Bipunctus</i>) <i>incinctus</i> (Mulsant, 1850)					1
<i>Propylea japonica</i> (Thunberg, 1781)	6	6	7	35	27
<i>Scymnus</i> (<i>Neopullus</i>) <i>babai</i> Sasaji, 1971			5		
<i>Scymnus</i> (<i>Pullus</i>) <i>posticalis</i> Scard, 1912			1		1
Cryptophagidae sp.					1
<i>Cardipennis shaowuensis</i> (Voss, 1958)	2	6			

<i>Cardipennis sulcithorax</i> (Hustache, 1916)		3		6	
<i>Ceutorhynchus</i> (<i>Ceutorhynchus</i>) <i>albosuturalis</i> (Roelofs, 1875)	68	1			
<i>Ceutorhynchus</i> (<i>Ceutorhynchus</i>) <i>filiae</i> Dalla Torre, 1922				2	
<i>Cosmobaris scolopacea</i> (Germar, 1819)					1
<i>Dorytomus</i> (<i>Dorytomus</i>) <i>imbecillus</i> Faust, 1883		17	29		
<i>Dorytomus</i> (<i>Dorytomus</i>) <i>roelofsi</i> Faust, 1882			1		
<i>Hypera</i> (<i>Hypera</i>) <i>postica</i> (Gyllenhal, 1813)				1	
<i>Psilarthroides czerskyi</i> (Zaslavskij, 1956)		6			3
Elateridae sp.					1
<i>Lissorhoptrus oryzophilus</i> Kuschel, 1952		1			1
Lathridiidae sp. 1			1		
Lathridiidae sp. 2					2
<i>Malachius</i> (<i>Malachius</i>) <i>prolongatus</i> Motschulsky, 1866	2	1		12	4
Mordellidae sp.					3
<i>Psammoecus</i> sp.					5
Silvanidae sp.					2
<i>Paederus</i> (<i>Heteropaederus</i>) <i>fuscipes</i> Curtis, 1826	1				
<i>Luprops orientalis</i> (Motschulsky, 1868)			1		
Asilidae sp.					1
<i>Chlorops oryzae</i> Matsumura, 1915		10	8		45
<i>Dolichopus nitidus</i> Fallen, 1823			3	26	219
<i>Sciasminettia similis</i> Shatalkin, 2000					1
<i>Colobaea</i> sp.					1
<i>Sepedon aenescens</i> Wiedemann, 1830		1			
<i>Sphaerophoria menthastri</i> (Linnaeus, 1758)			2		
Tephritidae sp.			1		
<i>Amphiareus obscuriceps</i> (Poppius, 1909)					1
Anthocoridae sp.					92
<i>Orius</i> (<i>Heterorius</i>) <i>sauteri</i> (Poppius, 1909)				31	
<i>Metatropis tesongsanicus</i> Josifov, 1975		1			
<i>Austroasca vittata</i> (Lethierry, 1884)				776	625
<i>Cicadella viridis</i> (Linnaeus, 1758)					1
Cicadellidae sp. 1					25
Cicadellidae sp. 2					2
Cicadellidae sp. 3					1
Cicadellidae sp. 4			3		
Cicadellidae sp. 5			2		
<i>Dryodurgades lamellaris</i> Vilbaste, 1968					4
<i>Goniagnathus</i> (<i>Epitephra</i>) <i>rugulosus</i> (Haupt, 1917)				1	2
<i>Macrosteles brunnescens</i> Anufriev, 1968					10
<i>Metalimnus steini</i> (Fieber, 1869)			1		
<i>Nakaharanus sagittarius</i> Kwon and Lee, 1979					3
<i>Ziczacella steggerdai</i> (Ross, 1965)		11	3		

<i>Acanthocoris sordidus</i> (Thunberg, 1783)					2
<i>Cletus punctiger</i> (Dallas, 1852)	1				
<i>Geotomus pygmaeus</i> (Dallas, 1851)			1		
<i>Dimorphopterus japonicus</i> (Hidaka, 1959)					1
<i>Geocoris</i> (<i>Piocoris</i>) <i>varius</i> (Uhler, 1860)					1
<i>Nysius plebejus</i> Distant, 1883	3			51	
<i>Pachygrontha antennata</i> (Uhler, 1860)	1				1
<i>Stigmatonotum rufipes</i> (Motschulsky, 1866)		1			1
<i>Apolygus lucorum</i> (Meyer-Dür, 1843)	1			32	48
<i>Apolygus spinolae</i> (Meyer-Dür, 1841)				7	2
<i>Capsus cinctus</i> (Kolenati, 1845)		107	188		1
<i>Deraeocoris</i> (<i>Camptobrochis</i>) <i>pulchellus</i> (Reuter, 1906)				3	2
<i>Europiella artemisiae</i> (Becker, 1864)		1		207	419
<i>Orthocephalus funestus</i> Jakovlev, 1881				3	10
<i>Orthotylus flavosparsus</i> (Sahlberg, 1841)	83	5			
<i>Plagiognathus amurensis</i> Reuter, 1883	23	28	1	18	
<i>Plagiognathus yomogi</i> Miyamoto, 1969					31
<i>Polymerus</i> (<i>Polymerus</i>) <i>amurensis</i> Kerzhner, 1988		5			
<i>Psallus</i> (<i>Calopsallus</i>) <i>clarus</i> Kerzhner, 1988				1	
<i>Stenodema calcarata</i> (Fallén, 1807)		3	1		
<i>Taylorilygus apicalis</i> (Fieber, 1861)					12
<i>Orthezia urticae</i> (Linnaeus, 1758)				29	
<i>Eysarcoris gibbosus</i> Jakovlev, 1904			1		
<i>Nezara antennata</i> Scott, 1874		1			
<i>Zicrona caerulea</i> (Linnaeus, 1758)					3
<i>Piesma capitatum</i> (Wolff, 1804)	16				
<i>Rhopalus</i> (<i>Aeschyntelus</i>) <i>maculatus</i> (Fieber, 1837)				1	
<i>Corythucha marmorata</i> Uhler, 1878		1	3		58
<i>Metasalis populi</i> (Takeya, 1932)		3			
Apidae sp.					1
<i>Apis mellifera</i> Linnaeus, 1758					2
<i>Eucera</i> (<i>Eucera</i>) <i>sociabilis</i> (Smith, 1873)					1
Argidae sp.			1		
<i>Nylanderia flavipes</i> (Smith, 1874)					1
<i>Nylanderia sakurae</i> (Ito, 1914)					1
<i>Tetramorium tsushimae</i> Emery, 1925				71	177
Ichneumonidae sp.			3		2
<i>Polistes snelleni</i> Saussure, 1862				1	
<i>Paracercion calamorum</i> (Ris, 1916)		2			

Table S4. Comparison table of the Sørensen similarity indices for the terrestrial insects in each plant community with sampling units from 2020

Sørensen similarity		<i>C. album</i>			<i>B. syzigachne</i>			<i>A. indica</i>		
		a	b	ab	a	b	ab	a	b	ab
<i>C. album</i>	a									
	b	0.62								
	ab	0.71	0.94							
<i>B. syzigachne</i>	a	0.30	0.36	0.34						
	b	0.28	0.34	0.32	0.62					
	ab	0.31	0.36	0.34	0.88	0.79				
<i>A. indica</i>	a	0.21	0.35	0.33	0.20	0.27	0.26			
	b	0.25	0.37	0.35	0.22	0.29	0.27	0.80		
	ab	0.24	0.35	0.33	0.21	0.28	0.26	0.86	0.96	

*a, initial 50 sweeps over 25 m; b, final 50 sweeps over 25 m; ab, 100 sweep total over 50 m. *Values above 0.5 are provided in bold.

Table S5. Comparison table of the Bray–Curtis similarity indices for the terrestrial insects among the plant communities with sampling units from 2020

Bray–Curtis similarity		<i>C. album</i>			<i>B. syzigachne</i>			<i>A. indica</i>		
		a	b	ab	a	b	ab	a	b	ab
<i>C. album</i>	a									
	b	0.44								
	ab	0.56	0.76							
<i>B. syzigachne</i>	a	0.37	0.46	0.53						
	b	0.54	0.52	0.38	0.58					
	ab	0.29	0.39	0.52	0.80	0.51				
<i>A. indica</i>	a	0.02	0.03	0.04	0.04	0.04	0.04			
	b	0.04	0.09	0.08	0.06	0.10	0.08	0.64		
	ab	0.02	0.05	0.05	0.05	0.06	0.06	0.77	0.55	

*a, initial 50 sweeps over 25 m; b, final 50 sweeps over 25 m; ab, total of 100 sweeps over 50 m. *Values above 0.1 are in bold.

Table S6. Comparison table of the Sørensen similarity indices for the terrestrial insects among the plant communities and years

Sørensen similarity	<i>B. syzigachne</i> 2020	<i>B. syzigachne</i> 2021	<i>A. indica</i> 2020	<i>A. indica</i> 2021
<i>B. syzigachne</i> 2020	0.34			
<i>B. syzigachne</i> 2021				
<i>A. indica</i> 2020	0.26	0.15	0.29	
<i>A. indica</i> 2021	0.25	0.2		

Table S7. Comparison table of the Bray–Curtis similarity indices for the terrestrial insects among the plant communities and years

Bray–Curtis similarity	<i>B. syzigachne</i> 2020	<i>B. syzigachne</i> 2021	<i>A. indica</i> 2020	<i>A. indica</i> 2021
<i>B. syzigachne</i> 2020	0.38			
<i>B. syzigachne</i> 2021				
<i>A. indica</i> 2020	0.06	0.02	0.62	
<i>A. indica</i> 2021	0.05	0.03		

*Values above 0.1 are highlighted in bold.

Table S8. The number of species by the sampling in 2020

	<i>C. album</i>		<i>B. syzigachne</i>		<i>A. indica</i>	
Sample tag	a	b	a	b	a	b
Number of species	10	16	23	19	18	22
Number of individuals	164	253	344	176	832	511

*a : initial 50 sweeps over 25 m. b: final 50 sweeps over 25 m.

Table S9. The number of species by the sampling in 2021

Plant community and sampling unit order number	Number of species	Number of individuals
<i>B. syzigachne</i> 1	8	25
<i>B. syzigachne</i> 2	6	15
<i>B. syzigachne</i> 3	5	28
<i>B. syzigachne</i> 4	9	23
<i>B. syzigachne</i> 5	5	16
<i>B. syzigachne</i> 6	5	23
<i>B. syzigachne</i> 7	11	47
<i>B. syzigachne</i> 8	5	31
<i>B. syzigachne</i> 9	11	47
<i>B. syzigachne</i> 10	10	29
<i>A. indica</i> 1	24	253
<i>A. indica</i> 2	24	358
<i>A. indica</i> 3	16	166
<i>A. indica</i> 4	22	199
<i>A. indica</i> 5	23	162
<i>A. indica</i> 6	22	123
<i>A. indica</i> 7	22	154
<i>A. indica</i> 8	17	221
<i>A. indica</i> 9	23	178
<i>A. indica</i> 10	16	113