

Partitioning the plant diversity of semi-natural grasslands across Japan

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TABLE S1 Presence (1) or absence (0) of grassland and/or Red Listed species in 11 semi-natural grassland sites in Japan (Fig. 1); see Table 1 for site codes and numbers of quadrats.

Species ¹	GR ²	National Red List status ³	Number of prefectures ⁴	Sites										
				AS	SK	AK	UG	SB	HZ	SN	AG	SG	MK	KT
<i>Herminium lanceum</i>		EN	26	0	0	0	0	0	0	1	0	0	0	0
<i>Lilium concolor</i>		EN	16	0	1	0	0	0	0	0	0	0	0	0
<i>Pulsatilla cernua</i>	GR	VU	43	0	0	1	0	0	0	0	0	0	0	0
<i>Saussurea pulchella</i>	GR	VU	34	0	0	1	0	0	0	0	0	0	0	0
<i>Platycodon grandiflorus</i>	GR	VU	29	0	0	1	1	0	1	0	0	0	0	0
<i>Bupleurum scorzonerifolium</i>	GR	VU	27	0	0	1	0	0	0	0	0	0	0	0
<i>Tephrosia flammea</i>	GR	VU	13	0	0	0	0	0	0	0	0	0	0	0
<i>Potentilla discolor</i>	GR	VU	10	0	0	1	0	0	0	0	0	0	0	0
<i>Ophelia tosaensis</i>		VU	34	0	0	0	0	0	0	0	0	0	0	0
<i>Lespedeza tomentosa</i>		VU	30	0	0	1	0	0	0	0	0	0	0	0
<i>Cephalanthera falcata</i>		VU	29	0	0	0	0	0	0	0	0	1	0	0
<i>Codonopsis ussuriensis</i>		VU	17	1	0	0	0	0	0	0	0	0	0	0
<i>Fimbristylis pierotii</i>		VU	8	0	0	1	0	0	0	0	0	0	0	0
<i>Aster tataricus</i>		VU	4	1	0	0	0	0	0	1	0	0	0	0
<i>Trigonotis radicans</i>		VU	1	1	0	0	0	0	0	0	0	0	0	0
<i>Euphorbia watanabei</i>		VU	1	0	0	0	0	0	0	0	1	0	0	0
<i>Silene sieboldii</i>		VU	1	1	0	0	0	0	0	0	0	0	0	0
* <i>Vincetoxicum pycnostelma</i>	GR		26	1	1	0	0	1	0	0	0	0	0	0
<i>Scabiosa japonica</i>	GR		23	0	0	0	1	0	1	0	1	0	0	0
<i>Iris ensata</i> var. <i>spontanea</i>	GR		18	1	0	0	0	0	0	0	1	1	0	0

<i>Hieracium umbellatum</i>	GR	15	0	1	0	0	0	0	0	0	0	0	0
<i>Atractylodes ovata</i>	GR	14	1	0	0	1	0	1	0	1	0	0	0
<i>Epipactis thunbergii</i>	GR	13	0	0	1	1	0	0	0	0	1	0	0
<i>Inula salicina</i>	GR	13	1	1	1	0	0	0	0	0	0	1	0
<i>Tephrosieris kirilowii</i>	GR	12	1	0	1	0	0	0	0	0	0	0	0
<i>Hemerocallis thunbergii</i>	GR	12	1	0	0	0	0	0	0	1	0	0	0
* <i>Libanotis ugoensis</i> var. <i>japonica</i>	GR	10	0	0	0	0	0	0	1	0	0	0	0
<i>Moehringia lateriflora</i>	GR	10	1	1	0	0	0	0	0	1	1	0	0
<i>Parnassia palustris</i>	GR	10	1	0	1	0	1	0	0	1	0	0	0
<i>Patrinia scabiosifolia</i>	GR	10	1	1	1	1	1	1	1	1	0	1	0
<i>Lilium japonicum</i>	GR	9	0	0	0	1	0	0	0	0	0	0	0
<i>Geranium krameri</i>	GR	8	1	0	0	0	0	0	0	1	1	0	0
<i>Serratula coronata</i> subsp. <i>insularis</i>	GR	8	1	0	0	0	0	1	0	1	1	0	0
<i>Achillea alpina</i>	GR	8	1	0	0	1	1	0	0	0	0	1	0
<i>Synurus excelsus</i>	GR	7	1	1	0	1	0	1	1	1	0	1	0
<i>Euphorbia lasiocaula</i>	GR	6	1	0	0	0	0	0	0	1	0	0	0
<i>Astilbe microphylla</i>	GR	6	1	0	0	0	0	1	1	1	1	0	0
<i>Viola violacea</i>	GR	5	1	0	0	1	0	0	0	1	0	0	0
* <i>Melampyrum ciliare</i>	GR	5	0	0	0	0	0	1	0	0	0	0	0
<i>Calamagrostis epigejos</i>	GR	5	0	0	0	0	0	0	0	1	0	0	0
<i>Gentiana scabra</i> var. <i>buergeri</i>	GR	5	1	1	1	1	1	1	1	1	1	0	1
<i>Synurus pungens</i>	GR	4	1	0	0	0	0	0	0	0	0	0	0
<i>Viola phalacrocarpa</i>	GR	4	0	0	0	0	0	0	1	0	1	0	0
<i>Themeda triandra</i>	GR	4	0	0	1	0	1	1	0	0	0	0	0
<i>Allium thunbergii</i>	GR	4	1	0	0	0	0	0	0	1	1	0	0
<i>Eupatorium chinense</i>	GR	4	0	1	0	0	0	0	0	0	0	0	0
* <i>Swertia japonica</i>	GR	4	1	0	1	1	0	0	0	1	0	0	0
* <i>Viola sieboldii</i>	GR	3	1	1	0	0	0	0	1	0	0	0	0
<i>Sorghum nitidum</i>	GR	3	0	0	1	0	0	0	0	0	0	0	0
<i>Spodiopogon sibiricus</i>	GR	3	1	0	0	1	1	1	0	1	1	1	0
<i>Cymbopogon goeringii</i>	GR	3	1	0	1	0	0	0	0	0	0	0	0
<i>Tricyrtis affinis</i>	GR	3	1	1	0	1	0	1	1	0	0	0	0

<i>Salvia japonica</i>	GR	0	1	1	1	0	1	0	0	1	1	0	0
<i>Spodiopogon cotulifer</i>	GR	0	0	0	0	0	0	0	0	1	0	0	0
<i>Prunella vulgaris</i> subsp. <i>asiatica</i>	GR	0	1	1	1	1	1	0	0	0	0	0	0
<i>Aralia cordata</i>	GR	0	0	0	0	0	0	0	0	0	0	1	0
<i>Ranunculus japonicus</i>	GR	0	1	1	1	0	0	0	0	1	1	0	0
<i>Hydrocotyle ramiflora</i>	GR	0	1	1	1	1	1	0	0	0	0	1	0
<i>Hosta sieboldiana</i>	GR	0	1	1	0	1	0	1	0	0	0	0	0
<i>Lysimachia clethroides</i>	GR	0	1	1	1	1	1	1	1	1	1	1	1
<i>Hypericum erectum</i>	GR	0	1	1	1	1	1	1	1	1	0	0	1
<i>Artemisia japonica</i>	GR	0	1	1	1	1	0	1	1	1	0	1	0
<i>Thesium chinense</i>	GR	0	0	0	0	1	0	1	0	1	1	0	0
<i>Agrimonia pilosa</i>	GR	0	0	0	0	0	1	0	0	0	1	1	1
<i>Clinopodium chinense</i> subsp. <i>grandiflorum</i>	GR	0	1	1	0	0	0	0	0	0	1	0	0
<i>Geranium thunbergii</i>	GR	0	1	1	0	1	0	0	0	1	1	0	0
* <i>Picris hieracioides</i> subsp. <i>japonica</i>	GR	0	1	1	0	1	0	0	0	1	0	1	0
<i>Lysimachia japonica</i>	GR	0	1	1	1	1	1	0	0	1	0	0	0
<i>Adenophora triphylla</i> var. <i>triphylla</i>	GR	0	1	0	1	1	0	0	0	0	0	0	0
<i>Eupatorium lindleyanum</i> var. <i>lindleyanum</i>	GR	0	1	1	1	1	1	0	0	1	1	0	0
<i>Angelica pubescens</i>	GR	0	1	0	0	0	0	0	1	0	1	1	0
<i>Zoysia japonica</i>	GR	0	0	0	1	0	1	0	0	0	0	0	0
<i>Heloniopsis orientalis</i>	GR	0	1	0	0	0	0	0	0	0	0	0	0
<i>Aster scaber</i>	GR	0	1	1	1	1	1	1	1	1	1	1	0
<i>Miscanthus sinensis</i>	GR	0	1	1	1	1	1	1	1	1	1	1	1
<i>Viola mandshurica</i>	GR	0	1	1	1	1	1	1	1	1	0	0	0
<i>Leibnitzia anandria</i>	GR	0	1	0	1	1	1	1	1	0	0	1	0
<i>Viola grypceras</i>	GR	0	1	1	0	1	1	0	0	1	0	1	0
<i>Imperata cylindrica</i>	GR	0	1	0	1	1	1	0	1	0	0	0	0
<i>Euchiton japonicus</i>	GR	0	1	0	0	0	0	0	0	0	0	0	0
<i>Arundinella hirta</i>	GR	0	1	1	1	1	1	1	1	1	1	1	0
<i>Cirsium nipponicum</i>	GR	0	0	0	0	0	0	0	0	1	0	0	0
<i>Ixeris dentata</i>	GR	0	1	1	1	1	1	1	1	1	1	1	1
<i>Agrostis clavata</i>	GR	0	0	0	0	1	0	0	0	1	0	0	0

<i>Senecio nemorensis</i>	7	0	0	0	0	0	0	0	0	0	1	0
<i>Lysimachia europaea</i>	6	0	0	0	0	0	0	0	0	0	0	0
<i>Rhynchospora rubra</i>	5	0	0	1	0	0	0	0	0	0	0	0
<i>Platanthera minor</i>	5	0	0	0	0	0	0	1	0	0	0	0
<i>Senna nomame</i>	5	0	0	1	0	0	0	0	0	0	0	0
<i>Lycoris sanguinea</i>	5	1	0	0	0	0	0	0	0	0	0	0
<i>Sedum kamtschaticum</i>	5	1	0	0	0	0	0	0	0	0	0	0
<i>Parathelypteris angustifrons</i>	5	0	1	0	0	0	0	0	0	0	0	0
<i>Aeginetia indica</i>	5	1	1	1	1	0	0	0	0	0	0	0
<i>Veratrum maackii</i>	5	1	0	0	0	0	1	0	0	1	0	0
<i>Aster hispidus</i>	5	1	0	1	0	0	0	0	0	0	0	0
<i>Maianthemum dilatatum</i>	5	1	0	0	0	0	0	0	0	0	0	0
<i>Vicia unijuga</i>	4	0	0	0	0	0	0	0	1	0	0	0
<i>Dunbaria villosa</i>	4	1	0	1	0	1	0	0	0	0	0	0
<i>Stachys riederi</i> var. <i>hispidula</i>	4	0	0	0	0	0	0	0	1	0	0	0
<i>Lycopus lucidus</i> var. <i>maackianus</i>	4	0	0	0	0	0	0	0	0	0	0	1
<i>Artemisia lancea</i>	4	1	0	1	0	0	0	0	0	0	0	0
<i>Actaea japonica</i>	4	1	1	0	0	0	0	0	0	0	0	0
<i>Liparis kumokiri</i>	4	1	0	0	0	0	0	0	0	0	0	0
* <i>Cynanchum maximowiczianum</i>	4	0	0	0	0	0	0	0	1	0	0	0
<i>Macrothelypteris viridifrons</i>	3	0	0	0	0	0	0	0	0	0	1	0
<i>Galium kinuta</i>	3	0	0	0	0	0	0	0	1	0	0	0
<i>Cardiandra alternifolia</i>	3	1	0	0	0	0	0	0	0	0	0	0
<i>Cremastra appendiculata</i> var. <i>variabilis</i>	3	1	0	0	0	0	0	0	0	0	0	0
<i>Circaea erubescens</i>	3	0	0	0	0	0	0	0	1	0	0	0
<i>Leptorumohra miqueliana</i>	3	0	0	0	0	0	0	0	0	0	0	0
<i>Cirsium purpuratum</i>	3	0	0	0	0	0	0	0	1	0	0	0
<i>Paraprenanthes sororia</i>	3	0	1	0	0	0	0	0	0	0	0	0
<i>Syneilesis palmata</i>	3	0	0	0	0	0	1	0	0	0	0	0
<i>Tricyrtis macropoda</i>	3	1	1	0	0	0	1	0	0	0	0	0
<i>Dendranthema japonicum</i>	3	0	0	0	1	0	0	0	0	0	0	0
<i>Swertia bimaculata</i>	3	0	0	0	0	0	0	0	1	0	0	0

<i>Rubus hirsutus</i>	1	0	1	0	0	1	0	0	0	0	0	0
<i>Hosta sieboldii</i>	1	1	0	0	0	0	1	0	1	1	0	0
<i>Dioscorea gracillima</i>	1	0	0	0	1	0	0	0	0	0	0	0
<i>Comanthosphace japonica</i>	1	0	0	0	0	0	0	0	0	1	0	0
<i>Clinopodium gracile</i>	1	1	0	0	0	0	0	0	1	0	0	0
<i>Polygonatum falcatum</i>	1	0	0	1	0	0	0	0	0	1	0	1
<i>Neanotis hirsuta</i>	1	0	0	0	0	0	0	0	1	0	0	0
<i>Chloranthus serratus</i>	1	1	1	0	0	0	0	0	0	0	1	0
<i>Disporum sessile</i>	1	1	1	0	0	0	0	0	0	1	0	0
<i>Clematis apiifolia</i>	1	0	0	0	0	0	0	0	1	0	0	0
<i>Apios fortunei</i>	1	0	1	0	1	0	0	1	0	0	0	0
<i>Pilea pumila</i> var. <i>hamaoi</i>	1	0	0	0	0	0	0	0	1	0	0	0
<i>Galium bungei</i> var. <i>trachyspermum</i>	1	0	0	0	0	0	0	0	1	0	0	0

¹ Nomenclature conforms to The Plant List (2013). *, BG plant names listed on YList (2003) that were unresolved in The Plant Red List

² GR, grassland species

³ EN, Endangered; VU, Vulnerable

⁴ Number of prefectures in which the species was included in the prefectural Red List (N = 45)