

A Check List of Sexual System of Angiosperm Species and Genera in the Japanese Flora III

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Key words : angiosperms, Japanese flora, sexual system.

The sex expression of all angiosperm species known to Japan was surveyed by scrutinizing literature and/or field observation. The check list is continued from the No.19 of this Annual Report, and a part of the results, from Compositae (Asteraceae) to Flagellariaceae, is shown.

Sexual type was classified into the following eight categories. The abbreviation is shown parenthesis.

Cosexuality

Hermaphroditism (CH); Monoecy (CM); Andromonoecy (CA); Gynomonoecy (CG)

Dioecy

Dioecy (DD); Androdioecy (DA); Gynodioecy (DG)

Polugamy

Polygamomonoecy, Polygamodioecy and other miscellaneous sexual types (PG)

In the table, A indicates no disagreement for sexual type among literature; B, disagreement among literature; C, sexual types was determined by direct field observations; *, no information. When sexual type is identical in the genus, only the number of species is written after the genus name (for example, *Achillea* 2ssp).

	CH	CM	CA	CG	DD	DA	DG	PM
Compositae								
<i>Achillea</i> 2ssp.				A				
<i>Adenocaulon himalaicum</i> Edgew.								B
<i>Adenostemma</i> 1sp.	A							
<i>Ainsliaea</i> 8ssp.	A							
<i>Anaphalis alpicola</i> Makino					A			

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	CH	CM	CA	CG	DD	DA	DG	PM
<i>C. inundatum</i> Makino								B
<i>C. japonicum</i> DC.								B
<i>C. kagamontanum</i> Nakai								B
<i>C. kamschaticum</i> Ledeb.								B
<i>C. lineare</i> (Thunb.) Sch.-Bip								B
<i>C. longepedunculatum</i> Kitam.								B
<i>C. lucens</i> Kitam.								B
<i>C. magofukui</i> Kitam.								B
<i>C. maritimum</i> Makino								B
<i>C. maruyamanum</i> Kitam.								B
<i>C. matsumurae</i> Nakai								B
<i>C. microspicatum</i> Nakai var. <i>kiotense</i> Kitam.								B
<i>C. nipponicum</i> (Maxim.) Makino								B
<i>C. norikurense</i> Nakai								B
<i>C. okamotoi</i> Kitam.	*							
<i>C. oligophyllum</i> (Franch. et Savat.) Matsum.								B
<i>C. pendulum</i> Fisch.								B
<i>C. purpuratum</i> (Maxim.) Matsum.								B
<i>C. sieboldii</i> Miq.								B
<i>C. spicatum</i> (Maxim.) Matsum.								B
<i>C. spinosum</i> Kitam.								B
<i>C. suffultum</i> (Maxim.) Matsum.								B
<i>C. suzukaense</i> Kitam.								B
<i>C. tashiroi</i> Kitam.								B
<i>C. tenue</i> Kitam.								B
<i>C. tenuisquamatum</i> Kitam.								B
<i>C. ugoense</i> Nakai								B
<i>C. yakushimense</i> Masam.								B
<i>C. yezoense</i> (Maxim.) Makino								B
<i>Conyza</i> 1sp.				A				
<i>Crepidiastrum</i> 3ssp.	A							
<i>Crepis</i> 2ssp.	A							
<i>Crossostephium</i> 1sp.				A				
<i>Dendrocacalia</i> 1sp.	A							
<i>Dendranthema</i> 14ssp.				A				
<i>Diaspananthus</i> 1sp.	A							
<i>Dichrocephala</i> 1sp.				A				
<i>Echinops</i> 1sp.	A							

	CH	CM	CA	CG	DD	DA	DG	PM
<i>Eclipta prostrata</i> (L.) L.	*							
<i>Elephantopus</i> 2ssp.	A							
<i>Emilia</i> 1sp.	A							
<i>Erigeron</i> 3ssp.				A				
<i>Eupatorium</i> 7ssp.	A							
<i>Farfugium</i> 2ssp.				A				
<i>Gnaphalium</i> 4ssp.				A				
<i>Hemistepta</i> 1sp.	A							
<i>Heteropappus</i> 1sp.				A				
<i>Hieracium</i> 2ssp.	A							
<i>Hololeion</i> 2ssp.	A							
<i>Hypochoeris</i> 1sp.	A							
<i>Inula</i> 3ssp.				A				
<i>Ixeris</i> 9ssp.	A							
<i>Kalimeris</i> 6ssp.				A				
<i>Lactuca</i> 5ssp.	A							
<i>Lagenophora lanata</i> A. Cunn.								B
<i>L. makinoi</i> Koidz.								B
<i>Lapsana</i> 2ssp.	A							
<i>Leibnitzia</i> 1sp.				A				
<i>Leontopodium</i> 5ssp.		A						
<i>Leucanthemella</i> 1sp.				A				
<i>Ligularia</i> 8ssp.				A				
<i>Matricaria matricarioides</i> (Less.) Porter	A							
<i>M. tetragonosperma</i> (Fr. Schm.) Hara et Kitam.				A				
<i>Miricacalia</i> 1sp.	A							
<i>Miyamayomena</i> 1sp.				A				
<i>Myriactis</i> 1sp.				A				
<i>Nipponanthemum</i> 1sp.				A				
<i>Pertya</i> 5ssp.	A							
<i>Petasites</i> 1sp.					A			
<i>Picris</i> 1sp.	A							
<i>Prenanthes</i> 2ssp.	A							
<i>Rhynchospermum</i> 1sp.				A				
<i>Saussurea</i> 25ssp.	A							
<i>Scorzonera</i> 1sp.	A							
<i>Senecio</i> 12ssp.				A				
<i>Serratula</i> 1sp.	A							

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Siegesbeckia 1sp.				A				
Solidago 3ssp.				A				
Sonchus 2ssp.	A							
Syneilesis 3ssp.	A							
Synurus 3ssp.	A							
Tanacetum 1sp.				A				
Taraxacum 21ssp.	A							
Vernonia 1sp.	A							
Wedelia 4ssp.				A				
Xanthium 1sp.		A						
Youngia 4ssp.	A							
Alismataceae								
Alisma 2ssp.	A							
Caldesia 1sp.	A							
Sagittaria 3ssp.		A						
Hydrocharitaceae								
Blyxa 4ssp.	A							
Enhalus 1sp.					A			
Halophila ovalis (R. Br.) Hook. fil.								A
Hydrilla 1sp.					A			
Hydrocharis dubia (Blume) Backer								B
Ottelia 2ssp.	A							
Thalassia 1sp.					A			
Vallisneria 2ssp.					A			
Scheuchzeriaceae								
Scheuchzeria 1sp.	A							
Juncaginaceae								
Triglochin 2ssp.	A							
Potamogetonaceae								
Potamogeton alpinus Balbis	A							
P. compressus L.	A							
P. crispus L.	A							
P. cristatus Regel et Maack	A							
P. dentatus Hagstr.	A							
P. distinctus A. Benn.	A							
P. fryeri A. Benn.	A							
P. gramineus L. var. heterophyllus (Schreb.) Fries	A							
P. iriomotensis Masam.		A						

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<i>P. maackianus</i> A. Benn.	A							
<i>P. malaianus</i> Miq.	A							
<i>P. natans</i> L.	A							
<i>P. octandrus</i> Poir.	A							
<i>P. oxyphyllus</i> Miq.	A							
<i>P. panormitanus</i> Biv.	A							
<i>P. pectinatus</i> L.	A							
<i>P. perfoliatus</i> L.	A							
<i>P. praelongus</i> Wulf	A							
<i>P. pusilla</i> L.	A							
<i>Ruppia maritima</i> L.								B
Zosteraceae								
<i>Phyllospadix</i> 2ssp.					A			
<i>Zostera</i> 5ssp.		A						
Zannichelliaceae								
<i>Cymodocea</i> 2ssp.		A						
<i>Halodule</i> 2ssp.		A						
<i>Syringodium</i> 1sp.		A						
<i>Zannichellia</i> 1sp.		A						
Najadaceae								
<i>Najas ancistocarpa</i> A. Br.		A						
<i>N. graminea</i> Del.		A						
<i>N. indica</i> (Willd.) Cham.		A						
<i>N. japonica</i> Nakai		A						
<i>N. marina</i> L.					A			
<i>N. minor</i> All.		A						
<i>N. oguraensis</i> Miki		A						
<i>N. tenuicaulis</i> Miki					A			
<i>N. yezoensis</i> Miyabe		A						
Triuridaceae								
<i>Sciaphila japonica</i> Makino								B
<i>Sciaphila okabeana</i> Tuyama		A						
<i>S. takakumensis</i> Ohwi	A							
<i>S. tosaensis</i> Makino								B
Liliaceae								
<i>Alectrorurus</i> 1sp.					A			
<i>Aletris</i> 3ssp.	A							
<i>Allium grayi</i> Regel	A							

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<i>Allium monanthum</i> Maxim.								B
<i>A. schoenoprasum</i> L.	A							
<i>A. splendens</i> Willd.	A							
<i>A. thunbergii</i> G. Don	A							
<i>A. togashii</i> Hara	A							
<i>A. tuberosum</i> Rottl.	A							
<i>A. victorialis</i> L. var. <i>platyphyllum</i> (Hulten) Makino	A							
<i>A. virgunculae</i> F. Maekawa et Kitam.	A							
<i>Amana</i> 2ssp.	A							
<i>Asparagus</i> 4ssp.					A			
<i>Caloscordum</i> 1sp.	A							
<i>Cardicrinum</i> 1sp.	A							
<i>Chionographis japonica</i> Maxim.								C
<i>C. koidzumiana</i> Ohwi	A							
<i>Clintonia</i> 1sp.	A							
<i>Convallaria</i> 1sp.	A							
<i>Dianella</i> 1sp.	A							
<i>Disporum</i> 4ssp.	A							
<i>Erythronium</i> 1sp.	A							
<i>Fritillaria amabilis</i> Koidz.	A							
<i>Fritillaria camtschatscensis</i> (L.) Ker-Gawl.			C					
<i>Fritillaria japonica</i> Miq.	A							
<i>Gagea</i> 2ssp.	A							
<i>G. vaginata</i> Pascher	*							
<i>Heloniopsis</i> 3ssp.	A							
<i>Hemerocallis</i> 4ssp.	A							
<i>H. flava</i> L. var. <i>yezoensis</i> (Hara) M. Hotta	*							
<i>Heterosmilax</i> 1sp.					A			
<i>Hosta</i> 17ssp.	A							
<i>Japonolirion</i> 1sp.	A							
<i>Lilium</i> 12ssp.	A							
<i>Lilium alexandrae</i> Hort.	*							
<i>Liriope</i> 3ssp.	A							
<i>Lloydia</i> 2ssp.	A							
<i>Maianthemum</i> 2ssp.	A							
<i>Metanarthecium</i> 1sp.	A							
<i>Narthecium</i> 1sp.	A							
<i>Ophiopogon</i> 3ssp.	A							

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Philydraceae								
Philydrum 1sp.	A							
Juncaceae								
Juncus 26ssp.	A							
Luzula 12ssp.	A							
Commelinaceae								
Commelina 5ssp.	A							
Forrestia 1sp.	A							
Murdannia 3ssp.	A							
Pollia 1sp.		A						
Streptolirion 1sp.	A							
Eriocaulaceae								
Eriocaulon 38ssp.		A						
Paepanthus 1sp.		A						
Flagellariaceae								
Flagellaria 1sp.	A							