

Table 5. Summarized table of the Camellieta japonicae in the Setouchi districts and the neighbouring areas

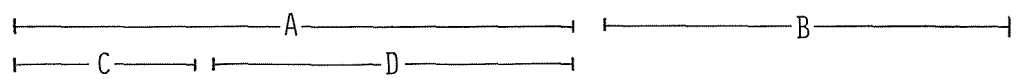
- A : Symploco glaucae-Castanopsietum sieboldii
- B : Symploco lucidae-Castanopsietum cuspidatae
- C : Photinio-Castanopsietum cuspidatae
- D : Castanopsis cuspidata-Cleyera japonica Comm.
- E : Castanopsis cuspidata-Epimedium grandiflorum subsp. sempervirens Comm.
- F : Osmantho-Cyclobalanopsietum

—A— —B— —C— —D— —E— —F—

Locality no.	1	2	3	4	5	6	8	10	22	29	27	28
Number of plots	30	8	7	15	32	21	12	31	15	16	11	29
Character and differential species of Symploco glaucae-Castanopsietum sieboldii												
<i>Myrsine seguinii</i> (Taimintachibana)	V	V	V	II	.	.	V	II	.	.	.	.
<i>Symplocos glauca</i> (Mimizubai)	III	V	V	V	.	.	V	I	.	II	.	.
<i>Elaeocarpus sylvestris</i> var. <i>ellipticus</i> (Horutonoki)	IV	V	V	.	.	.	II	.	.	.	.	.
<i>Chloranthus glaber</i> (Senryo)	II	II	IV	.	I	.	.	.	.	II	.	.
<i>Meliosma rigida</i> (Yamabiwa)	II	II	V	.	I	.	I	I	.	.	.	.
<i>Anodendron affine</i> (Sakakikazura)	III	IV	III	I	.	.	I	.	.	.	.	.
<i>Alpinia japonica</i> (Hanamyoga)	II	II	V	.	.	.	.	.	.	II	.	.
<i>Podocarpus nagi</i> (Nagi)	I	I	.	.	.	.	.	.	.	.	.	.
<i>Randia cochinchinensis</i> (Misaonoki)	II	.	.	.	.	.	.	.	.	.	.	.
<i>Prunus zippeliana</i> (Bakuchinoki)	I	II	.	.	.	.	.	.	.	.	.	.
<i>Piper kadsura</i> (Fuutoukazura)	II	IV	III	.	.	.	.	.	.	.	.	.
<i>Actinodaphne longifolia</i> (Baribarinoki)	.	.	IV	.	.	.	.	.	.	.	.	.
<i>Helicia cochinchinensis</i> (Yamamogashi)	II	II	II	II	.	.	.	.	.	.	.	.
<i>Distylium racemosum</i> (Isunoki)	III	IV	V	.	.	.	I	r	.	.	.	.
<i>Michelia compressa</i> (Ogatamanoki)	II	IV	I	I	I	.	I	I	.	.	.	.
<i>Ardisia pusilla</i> (Tsurukouji)	II	II	II	II	.	.	I	.	.	.	.	.
<i>Lasianthus japonicus</i> (Ruriminoki)	I	I	III	.	r	.	.	.	.	.	.	.
<i>Diospyros morrisiana</i> (Tokiwagaki)	I	.	.	.	.	.	I	r	.	.	.	.
<i>Microlepia strigosa</i> (Ishikaguma)	.	II	I	.	.	.	I	.	.	.	.	.
<i>Symplocos theophrastaefolia</i> (Kanzaburonoki)	I	I	IV	III	.	.	I	.	.	.	.	.
Character and differential species of Symploco lucidae-Castanopsietum cuspidatae												
<i>Symplocos lucida</i> (Kuroki)	.	.	.	IV	IV	V	.	.	.	.	.	.
<i>Ilex buergeri</i> (Shiimochi)	.	.	.	III	III	III	.	.	.	.	.	.
<i>Asarum hexalobum</i> (Sanyoaoi)	.	.	.	I	I	I	.	.	.	.	.	.
<i>Elaeocarpus japonicus</i> (Kobanmochi)	.	.	.	V	II	.	.	.	.	.	.	.
<i>Woodwardia japonica</i> (Ookaguma)	II	.	.	II	I	.	.	.	.	.	.	.
Character and differential species of Photinio-Castanopsietum cuspidatae												
<i>Photinia glabra</i> (Kanamemochi)	I	II	III	III	I	IV	V	V	IV	V	.	I
<i>Ilex chinensis</i> (Nanamenoki)	.	.	.	I	II	IV	III	III	I	I	.	r
<i>Ilex latifolia</i> (Tarayo)	.	.	.	I	I	.	I	II	I	I	I	.
<i>Prunus spinulosa</i> (Rinboku)	.	II	IV	I	II	III	I	II	I	.	.	I
<i>Vaccinium bracteatum</i> (Shashanbo)	r	II	IV	III	II	II	IV	IV	III	IV	II	I
Differential species of Castanopsis cuspidata-Epimedium grandiflorum subsp. sempervirens Community												
<i>Epimedium grandiflorum</i> subsp. <i>sempervirens</i> (Tokaiwaikariso)	.	.	.	.	.	.	.	.	.	.	IV	I
<i>Sasa palmata</i> (Yanefukizasa)	.	.	.	.	.	.	.	.	.	.	II	I
<i>Asarum kooyanum</i> var. <i>rigescens</i> (Atsumikanaoi)	.	.	.	.	.	.	.	.	.	.	II	.
<i>Cephalotaxus harringtonia</i> var. <i>nana</i> (Haiinugaya)	.	.	.	.	.	.	.	.	.	.	II	.
<i>Euonymus lanceolatus</i> (Murasakimayumi)	.	.	.	.	.	.	.	.	.	.	I	.
Character and differential species of Osmantho-Cyclobalanopsietum												
<i>Abies firma</i> (Momi)	.	.	.	.	.	.	.	.	III	I	I	III
<i>Illicium religiosum</i> (Shikimi)	I	.	III	II	II	II	I	II	III	III	I	IV
<i>Quercus sessilifolia</i> (Tsukubanegashi)	.	.	.	.	II	I	I	I	II	III	I	I
<i>Quercus myrsinaefolia</i> (Shirakashi)	.	.	.	.	I	.	.	.	I	I	II	III
<i>Quercus salicina</i> (Urajirogashi)	.	I	II	I	II	I	.	I	II	II	II	IV
<i>Quercus acuta</i> (Akagashi)	.	.	.	.	I	.	.	.	.	.	II	III
<i>Tsuga sieboldii</i> (Tsuga)	.	I	.	.	.	.	.	.	I	.	.	II
<i>Skimmia japonica</i> (Miyamashikimi)	.	.	.	.	.	I	.	.	III	.	III	III
<i>Daphniphyllum macropodum</i> (Yuzuriha)	.	.	.	.	.	I	.	.	.	.	.	III
<i>Cephalotaxus harringtonia</i> (Inugaya)	.	.	III	.	.	.	.	.	I	I	.	IV
<i>Torreya nucifera</i> (Kaya)	.	.	II	.	.	.	.	I	I	.	.	IV
Character and differential species of Ardisio-Castanopsion												
<i>Quercus glauca</i> (Arakashi)	I	II	V	IV	V	V	V	V	V	V	I	III
<i>Trachelospermum asiaticum</i> (Teikakazura)	IV	IV	V	IV	V	V	III	V	V	IV	V	IV
<i>Ardisia japonica</i> (Yabukouji)	I	.	III	I	V	IV	III	IV	V	V	V	V
<i>Ophiopogon ohwi</i> (Nagabajanohige)	.	III	V	II	IV	II	III	IV	V	V	V	IV
<i>Dryopteris erythrosora</i> (Benishida)	II	V	II	V	V	V	V	V	V	V	V	IV
<i>Dryopteris pacifica</i> (Ooitachishida)	.	I	II	I	II	.	I	I	.	I	II	.
<i>Cymbidium goeringii</i> (Shunran)	I	.	I	II	III	I	.	II	III	III	II	III
<i>Elaeagnus pungens</i> (Nawashirogumi)	.	II	I	I	II	II	I	II	I	III	.	III
<i>Dryopteris bissetiana</i> (Yamaitachishida)	.	.	II	.	I	.	.	r	.	I	.	I
Character and differential species of Camellieta japonicae and Camellieta japonicae												
<i>Camellia japonica</i> (Yabutsabaki)	V	IV	II	V	V	V	V	V	V	V	V	V
<i>Eurya japonica</i> (Hisakaki)	V	III	V	V	V	V	V	V	V	V	V	V
<i>Ligustrum japonicum</i> (Nezumimochi)	IV	V	V	III	V	III	V	V	IV	V	.	III
<i>Cleyera japonica</i> (Sakaki)	II	IV	V	III	IV	IV	IV	V	V	V	III	III
<i>Cinnamomum japonicum</i> (Yabunikkei)	IV	V	II	II	IV	III	III	IV	IV	IV	IV	V
<i>Aucuba japonica</i> (Aoki)	.	.	III	I	II	II	II	III	IV	V	V	V
<i>Kadsura japonica</i> (Sanekazura)	III	I	IV	III	II	III	III	IV	III	IV	III	III
<i>Liriope platyphyllum</i> (Yaburan)	.	.	.	II	III	II	III	IV	II	IV	IV	II
<i>Neolitsea sericea</i> (Shirodamo)	III	II	II	I	II	II	II	II	I	III	.	III
<i>Ficus nipponica</i> (Itabikazura)	II	III	III	I	II	I	.	II	III	II	II	I
Differential species of Castanopsis type forests												
<i>Castanopsis cuspidata</i> (incl. var. <i>sieboldii</i>) (Shii)	V	IV	V	V	V	V	V	V	V	V	V	.
<i>Ilex integra</i> (Mochinoki)	II	III	II	II	III	II	III	I	II	III	IV	r
<i>Actinodaphne lancifolia</i> (Kagonoki)	II	III	II	.	I	.	I	II	II	.	II	II
<i>Stauntonia hexaphylla</i> (Mube)	II	II	.	.	II	II	I	II	III	I	III	I
<i>Ardisia crenata</i> (Manryo)	II	III	III	III	IV	V	I	III	I	III	.	I
<i>Elaeagnus glabra</i> (Tsurugumi)	.	II	III	II	II	.	I	I	I	II	I	I
<i>Machilus thunbergii</i> (Tabunoki)	IV	V	III	IV	V	IV	.	r	.	V	V	.
Companions												
<i>Dendropanax trifidus</i> (Kakuremino)	II	IV	III	III	V	V	III	V	II	V	III	.
<i>Myrica rubra</i> (Yamamoto)	II	II	.	II	II	I	III	II	.	I	.	.
<i>Ilex rotunda</i> (Kuroganemochi)	II	II	I	I	I	I	III	IV	.	III	.	r
<i>Temstroemia gymnanthera</i> (Mokkoku)	III	IV	I	II	III	II	III	IV	I	I	.	.
<i>Gardenia jasminoides</i> f. <i>grandiflora</i> (Kuchinashi)	IV	IV	II	I	II	III	III	II	.	III	.	r
<i>Symplocos prunifolia</i> (Kurobai)	I	II	III	IV	I	I	III	IV	I	II	.	.
<i>Podocarpus macrophyllum</i> (Inumaki)	II	V	III	I	I	I	IV	III	.	III	.	.
<i>Dammacanthus major</i> (Juzunenoki)	.	.	.	.	I	.	II	I	.	II	.	.
<i>Dammacanthus indicus</i> (Aridooshi)	III	III	V	IV	I	II	II	II	.	II	.	.
<i>Daphniphyllum teijsmannii</i> (Himeyuzuriha)	IV	IV	V	.	III	.	II	II	.	I	II	.
<i>Maesa japonica</i> (Izusenryo)	II	II	IV	V	I	I	I	II	.	I	.	.
<i>Polystichopsis aristata</i> (Hosobakanawarabi)	V	V	IV	I	I	.	I	r	.	I	II	.
<i>Polystichopsis pseudo-aristata</i> (Kobanokanawarabi)	I	II	III	.	I	.	I	.	.	.	.	.
<i>Fatsia japonica</i> (Yatsude)	.	II	II	.	I	.	I	I	.	II	I	r
<i>Lemnaphyllum microphyllum</i> (Mamezuta)	III	II	IV	I	I	I	I	II	I	II	I	II
<i>Ilex pedunculosa</i> (Soyogo)	.	II	.	I	I	II	III	II	III	I	IV	III
<i>Hedera rhombea</i> (Kizuta)	.	I	I	.	IV	II	I	V	II	I	III	III
<i>Cinnamomum camphora</i> (Kusunoki)	.	IV	III	III	II	III	III	IV	I	II	.	.
<i>Lepisorus thunbergianus</i> (Nokishinobu)	.	I	II	.	I	II	.	I	III	II	III	.
<i>Thea sinensis</i> (Chanoki)	.	.	I	II	I	I	.	I	I	II	.	II
<i>Nandina domestica</i> (Nanten)	.	.	I	.	I	I	.	I	I	I	I	II
<i>Trachycarpus fortunei</i> (Shuro)	.	.	.	.	II	II	II	II	I	III	.	II
<i>Neolitsea aciculata</i> (Inugashi)	II	.	I	.	I	.	I	II	.	I	.	.
<i>Euonymus japonicus</i> (Masaki)	II	II	.	.	I	.	I	I	.	.	I	.
<i>Polystichopsis simplicior</i> (Hakatahida)	.	.	III	I	I	.	.	I	.	.	III	I
<i>Pieris japonica</i> (Asebi)	.	.	.	.	II	II	.	III	III	III	.	III
<i>Pasania glabra</i> (Shiribukagashi)	.	.	.	I	II	III	J	I	I	.	.	.
<i>Platogyria japonica</i> (Kijinooshida)	.	.	II	.	.	.	I	.	.	II	II	I
<i>Pittosporum tobira</i> (Tobera)	III	.	I	.	.	.	I	I	.	.	I	.
<i>Microlepia marginata</i> (Fumotoshida)	.	.	I	I	.	.	II	.	.	I	I	.
<i>Liparis nervosa</i> (Kokuran)	.	I	I	.	.	.	II	II	.	I	.	.
<i>Osmanthus heterophyllus</i> (Hiragi)	.	.	.	.	.	.	I	I	II	I	.	III
<i>Quercus phillyraeoides</i> (Ubamegashi)	I	II	.	.	.	.	II	r	.	.	.	.
<i>Polystichum polyblepharum</i> (Inode)	.	.	II	.	I	.	.	r	.	II	I	I
<i>Rohdea japonica</i> (Omoto)	.	.	.	.	I	I	.	.	.	I	.	r
<i>Ardisia crispa</i> (Karatachibana)	.	.	.	.	I	.	.	.	r	I	.	I
<i>Machilus japonica</i> (Hosobataba)	I	.	.	.	I	.	.	.	I	.	.	.
<i>Symplocos lancifolia</i> (Shirobai)	r	.	III	.	.	.	.	.	.	.	.	.
<i>Quercus gilva</i> (Ichiigashi)	.	I	.	.	I	.	.	r	.	.	.	.
<i>Diplazium subsinuatum</i> (Herashida)	.	.	III	.	.	.	I	.	.	I	.	.
<i>Dammacanthus macrophyllum</i> (Oobajuzunenoki)	.	.	.	I	II	.	.	I	.	.	.	.
<i>Dryopteris lacera</i> (Kumawarabi)	.	.	.	.	.	.	.	r	.	.	I	II
<i>Gardneria nutans</i> (Hooraikazura)	.	II	.	.	.	.	.	.	.	.	I	.
<i>Pyrrosia lingua</i>												

Table 6. Summarized table of the Photinio-Castanopsisium cuspidatae

A : dendropanacetosum
 B : quercetosum myrsinaefoliae
 C : variant of *Myrsine sequinii*
 D : variant of *typicum*



Locality no.	7	8	9	30	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
Number of plots	24	12	15	24	31	16	10	20	20	20	20	3	10	25	20	10	20	6	8	3	15	
Character and differential species of Photinio-Castanopsisium cuspidatae																						
<i>Photinia glabra</i> (Kanamemochi)	V	V	V	III	V	V	V	V	V	V	V	3	V	V	III	II	IV	V	V	3	V	
<i>Ilex chinensis</i> (Nanamenoki)	II	III	II	.	III	III	III	III	II	II	IV	1	II	II	I	.	I	I	V	2	I	
<i>Ilex latifolia</i> (Tarayou)	II	I	r	.	II	II	I	II	II	r	III	.	I	I	II	II	I	.	III	.	.	
<i>Prunus spinulosa</i> (Rinboku)	II	I	III	.	II	II	I	III	I	I	II	2	III	II	IV	IV	I	I	IV	2	IV	
<i>Vaccinium bracteatum</i> (Shashanbo)	III	IV	II	II	IV	V	III	IV	IV	V	IV	2	IV	II	III	II	III	V	IV	2	I	
Differential species of dendropanacetosum																						
<i>Dendropanax trifidus</i> (Kakuremino)	IV	III	V	V	V	.	III	II	V	V	II	.	.	I	r	I	II	.	.	.	.
<i>Myrica rubra</i> (Yamamomo)	II	III	I	II	II	III	III	I	II	II	I	.	I	.	.	.	.	.	.	.	I
<i>Ilex rotunda</i> (Kuroganemochi)	III	III	II	.	IV	III	III	II	I	I	II	1	.	.	.	.	.	.	.	.	.
<i>Ternstroemia gymnanthera</i> (Mokkoku)	IV	III	I	III	IV	II	II	II	II	III	r	.	I	II	I	.	I	.	.	.	I	
<i>Gardenia jasminoides</i> f. <i>grandiflora</i> (Kuchinasi)	III	III	I	III	II	II	I	I	I	II	II	2	.	.	r	.	.	.	.	.	.
<i>Symplocos prunifolia</i> (Kurobai)	II	III	IV	r	IV	III	II	II	I	III	III	3	I	I	r	.	I	.	.	.	2	V
<i>Podocarpus macrophyllus</i> (Inumaki)	I	IV	I	IV	III	II	I	.	I	I	.	1	I	.	.	I	.	.	.	.	I
<i>Damnanthus major</i> (Juzunenoki)	.	II	I	.	I	IV	.	I	I	.	I	3	I	.	.	.	.	.	.	.	I
<i>Damnanthus indicus</i> (Aridooshi)	III	II	I	III	II	I	II	III	I	.	III	.	.	.	.	.	.	II	.	.	I
<i>Daphniphyllum teijsmannii</i> (Himeyuzuriha)	II	II	IV	IV	II	I	.	I	I	.	.	.	.	.	.	.	.	.	.	.	.
<i>Maesa japonica</i> (Izusenryo)	IV	I	II	IV	II	I	I	II	II	.	III	1	.	.	I	.	.	.	.	.	V
<i>Polystichopsis aristata</i> (Hosobakanawarabi)	I	I	III	r	I	I	.	r	.	.	.	1	.	.	.	.	.	.	.	.	I
<i>Polystichopsis pseudo-aristata</i> (Kobanokanawarabi)	I	I	.	.	.	.	I	r	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Fatsia japonica</i> (Yatsude)	II	I	.	II	I	I	I	r	I	.	I	.	I	.	r	.	.	.	.	.	.
Differential species of quercetosum myrsinaefoliae																						
<i>Abies firma</i> (Momi)	I	I	.	.	II	I	.	I	II	I	I	.	IV	III	IV	III	III	V	II	.	V	
<i>Illicium religiosum</i> (Shikimi)	I	I	.	.	I	.	.	III	II	I	r	2	IV	II	V	IV	III	III	II	2	V	
<i>Quercus sessilifolia</i> (Tsukubanegashi)	I	.	.	.	.	.	I	.	.	I	.	.	III	III	II	I	II	IV	III	2	V
<i>Quercus myrsinaefolia</i> (Shirakashi)	.	.	I	.	.	I	I	I	.	I	I	.	III	III	II	II	I	II	II	2	.	
<i>Quercus salicina</i> (Urajirogashi)	I	.	III	I	I	I	I	II	I	I	.	.	II	IV	II	III	II	I	I	3	V	
<i>Quercus acuta</i> (Akagashi )	.	.	.	.	.	.	r	.	.	.	.	.	I	I	r	I	.	.	.	.	II
<i>Tsuga sieboldii</i> (Tsuga )	.	.	.	.	.	.	r	r	.	.	.	.	.	I	II	.	I	II	.	.	III
<i>Skimmia japonica</i> (Miyamashikimi )	.	.	.	.	.	.	r	.	r	.	.	.	.	I	II	III	III	.	.	.	.
<i>Daphniphyllum macropodum</i> (Yuzuriha )	.	.	.	.	.	.	.	.	.	.	.	.	I	I	III	I	.	.	.	.	.
<i>Cephalotaxus harringtonia</i> (Inugaya)	.	.	II	.	.	.	.	.	.	.	.	.	I	.	I	I	.	.	.	.	I
<i>Torreya nucifera</i> (Kaya)	r	.	I	.	I	.	.	.	I	.	.	.	I	I	I	II	I	.	.	.	II	
Differential species of variant of Myrsine sequinii																						
<i>Myrsine sequinii</i> (Taimintachibana)	III	V	III	IV	II	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Symplocos glauca</i> (Mimizubai)	IV	V	.	II	I	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Elaeocarpus sylvestris</i> var. <i>ellipticus</i> (Horutonoki)	III	II	.	IV	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Chloranthus glaber</i> (Senryo)	II	.	.	.	.	.	.	I	II	I	.	.	.	.	.	.	.	.	.	.	.
<i>Liriope spicata</i> (Koyaburan)	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Anodendron affine</i> (Sakakikazura)	II	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Alpinia japonica</i> (Hanamyouga)	II	.	.	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Elaeocarpus japonicus</i> (Kobanmochi)	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ficus stipulata</i> (Himeitabi)	I	.	.	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Prunus zippeliana</i> (Bakuchinoki)	I	.	.	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Piper kadsura</i> (Fuutoukazura)	.	.	.	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Meliosma rigida</i> (Yamabiwa)	I	I	.	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Diospyros morrisiana</i> (Tokiwagaki)	.	I	I	.	r	.	.	.	.	r	.	.	.	.	.	.	.	.	.	.	.
<i>Distylium racemosum</i> (Isunoki)	r	I	V	r	r	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Michelia compressa</i> (Ogamatanoki)	r	I	II	I	I	I	I	r	.	III	.	.	I	.	.	.	.	II	.	.	.
<i>Ardisia pusilla</i> (Tsurukouji)	r	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Character and differential species of Ardisio-Castanopsisium																						
<i>Quercus glauca</i> (Arakashi)	IV	V	V	II	V	V	V	V	V	V	V	3	V	V	V	IV	V	V	V	3	IV	
<i>Trachelospermum asiaticum</i> (Teikakazura)	IV	III	IV	V	V	IV	IV	V	IV	IV	III	2	II	IV	V	IV	V	I	III	2	V	
<i>Ardisia japonica</i> (Yabukouji)	IV	III	IV	III	IV	IV	II	V	III	V	II	1	III	V	IV	V	V	IV	III	1	.	
<i>Ophiopogon ohwi</i> (Nagabajanohige)	III	III	III	V	IV	III	V	V	V	III	III	3	IV	IV	IV	V	V	II	III	2	.	
<i>Dryopteris erythrosora</i> (Benishida)	V	V	V	IV	V	V	V	V	V	III	V	3	V	V	IV	III	V	V	V	3	V	
<i>Dryopteris pacifica</i> (Ooitachishida)	II	I	I	I	I	I	I	r	r	.	.	.	I	I	.	I	.	II	II	.	.	
<i>Dryopteris bissetiana</i> (Yamaitachishida)	I	.	.	I	r	.	.	.	.	r	1	.	.	I	.	.	.	.	.	1	I
<i>Cymbidium goeringii</i> (Shunran)	III	.	I	I	II	I	I	III	III	II	r	1	I	III	II	II	III	III	II	.	.	
<i>Elaeagnus pungens</i> (Nawashirogumi)	II	I	.	II	II	II	II	II	II	I	I	.	IV	I	I	III	I	.	I	.	I	
Character and differential species of Camellietaalia japonicae and Camellietaea japonicae																						
<i>Camellia japonica</i> (Yabutsubaki)	III	V	V	V	V	V	V	V	V	IV	V	3	V	V	V	V	V	V	V	3	II	
<i>Eurya japonica</i> (Hisakaki)	V	V	V	.	V	V	V	V	V	V	V	3	V	V	V	V	V	V	V	3	V	
<i>Ligustrum japonicum</i> (Nezumimochi)	V	V	V	V	V	V	IV	IV	IV	V	III	2	III	V	III	IV	IV	II	III	2	I	
<i>Cleyera japonica</i> (Sakaki)	V	IV	V	II	V	V	IV	V	V	V	V	3	V	V	V	IV	V	V	V	3	IV	
<i>Cinnamomum japonicum</i> (Yabunikkei)	IV	III	IV	V	IV	IV	IV	IV	IV	II	III	3	III	III	IV	IV	IV	III	III	2	.	
<i>Aucuba japonica</i> (Aoki)	II	II	III	II	III	IV	III	III	III	I	V	3	V	IV	IV	V	IV	IV	V	3	.	
<i>Kadsura japonica</i> (Sanekazura)	IV	III	II	IV	IV	III	II	II	III	II	III	1	I	II	III	III	III	I	III	2	.	
<i>Liriope platyphylla</i> (Yaburan)	I	III	.	II	IV	III	.	III	II	I	II	2	I	II	III	I	II	.	.	.	.
<i>Neolitsea sericea</i> (Shirodamo)	III	II	I	III	II	I	I	II	II	I	r	1	I	I	II	I	I	.	.	.	.
<i>Ficus nipponica</i> (Itabikazura)	III	.	II	III	II	I	III	II	II	I	I	1	II	II	r	III	III	.	.	1	I	
Differential species of Castanopsis type forests																						
<i>Castanopsis cuspidata</i> (incl. var. <i>sieboldii</i>) (Shii)	V	V	V	V	V	V	V	V	V	V	V	3	V	V	V	V	V	V	V	3	V	
<i>Ilex integra</i> (Mochinoki)	III	III	III	III	I	II	III	II	II	I	II	1	I	III	I	III	II	.	II	2	II	
<i>Actinodaphne lancifolia</i> (Kagonoki)	II	I	III	II	II	I	II	I	II	r	I	.	I	I	I	I	II	.	I	.	II	
<i>Stauntonia hexaphylla</i> (Mube)	I	I	III	III	II	.	I	r	I	I	.	.	.	.	I	.	II	III	.	.	II
<i>Ardisia crenata</i> (Manryo)	III	I	.	IV	III	III	I	III	V	II	I	.	I	II	III	I	I	.	II	.	I	
<i>Elaeagnus glabra</i> (Tsurugumi)	I	I	II	II	I	I	.	r	I	I	r	.	I	r	r	I	I	.	.	.	I	
<i>Machilus thunbergii</i> (Tabunoki)	.	.	.	r	r	.	.	.	r	.	.	.	.	.	.	.	.	.	.	.	.
Companions																						
<i>Pieris japonica</i> (Asebi)	I	.	I	.	III	I	II	IV	II	I	III	1	II	IV	V	III	III	V	III	2	V	
<i>Osmanthus heterophyllus</i> (Hiiragi)	I	I	III	r	I	I	III	II	II	II	r	2	IV	IV	III	III	III	V	.	3	IV	
<i>Ilex pedunculosa</i> (Soyogo)	II	III	II	.	II	IV	III	.	III	IV	II	1	IV	IV	IV	III	III	V	IV	2	II	
<i>Lemnaphyllum microphyllum</i> (Mamezuta)	I	I	II	II	II	II	II	II	II	.	I	1	II	II	II	I	I	.	I	2	IV	
<i>Lepisorus thunbergianus</i> (Nokishinobu)	I	.	II	r	I	II	I	II	II	II	r	.	I	III	II	I	II	II	.	.	III	
<i>Nandina domestica</i> (Nanten)	.	I	I	I	.	I	I	r	I	I	I	1	III	II	I	II	I	.	III	1	.	
<i>Cinnamomum camphora</i> (Kusunoki)	III	III	I	II	III	III	I	.	r	II	III	.	I	I	I	I	I	.	.	.	.
<i>Thea sinensis</i> (Chanoki)	I	.	.	.	.	.	.	II	r	III	3	.	II	I	II	I	I	I	III	.	.
<i>Plagiogyria japonica</i> (Kijinooshida)	r	I	.	.	.	I	.	II	r	.	III	2	I	I	I	.	.	III	I	1	I	
<i>Hedera rhombea</i> (Kizuta)	III	I	I	II	V	I	.	r	I	I	.	.	.	I	I	II	II	.	.	.	.
<i>Trachycarpus fortunei</i> (Shuro)	I	II	.	r	II	II	.	.	II	II	1	.	III	r	I	II	I	.	.	.	.
<i>Pyrrosia lingua</i> (Hitotsuba)	I	III	II	II	.	I	.	II	I	I	I	.	I	I	.	.	.	I	I	.	.	
<i>Neolitsea aciculata</i> (Inugashi)	r	I	II	I	I																	

TABLE 1. COPPICES OF PASANIA EDULIS MAKINO IN WESTERN KYUSHU, JAPAN.

Stand No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Locality*	1	2	3	3	4	5	5	5	6	6	6	7	7	7	7	8	9	9	9	10	10	10	11	
Altitude (m)	95	65	70	180	180	120	130	130	110	90	100	70	60	80	110	70	300	250	260	110	270	200	100	
Slope aspect	-	N	N	NW	W	NNE	SSE	NNW	NE	W	-	ESE	SSW	NNW	NE	-	-	E	-	SW	N	W	-	
Slope degree (°)	-	15	25	15	15	25	20	3	25	15	-	15	25	20	30	-	-	20	-	35	25	5	-	
Tree layer: height (m)	9				7	9	8	9	9	9	8	10	10		9							9	8	8
coverage (%)	95				85	95	95	95	90	90	80	80	80		95							85	90	90
Subtree layer: height (m)	6	6	6	5	5	6	6	6	6	6	6	6	6	6	6	4	5	7	4	7	4	7	6	-
coverage (%)	10	95	90	95	10	5	5	1	20	5	2	40	30	95	5	95	95	80	90	90	10	-	-	-
Shrub layer: height (m)	1.5	2.0	1.5	2.5	2.0	2.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.0	1.5	1.5	1.5	2.0	1.5	2.0	1.5	2.0	1.5	
coverage (%)	10	50	30	40	40	30	5	1	10	10	5	40	30	40	2	20	40	50	50	10	20	20	10	
Herb layer: height (cm)	70	70	70	50	30	70	70	70	70	70	70	70	70	80	70	50	70	80	50	70	70	80	70	
coverage (%)	20	40	10	30	30	15	2	3	10	5	5	30	20	1	5	10	20	10	10	5	10	5	10	
Sample-plot size (sq. m.)	50	64	100	70	64	100	100	100	100	100	100	50	100	100	100	50	25	25	35	150	150	100	100	
No. of species	30	29	28	31	29	40	30	28	30	29	25	38	34	21	20	14	33	34	30	16	25	32	13	
Camellietea character species																								
<i>Pasania edulis</i> Makino (Mateba-shii)	T1	54	.	.	54	55	44	55	55	55	54	34	33	.	54	.	.	.	.	.	54	54	55
	T2	11	44	55	54	+	+	+	+	+	+	11	+	55	11	55	33	44	33	54	.	.	.	
	S	12	+2	12	22	+	+2	+	+	+	+	11	11	12	12
	H
<i>Ligustrum japonicum</i> Thunb. (Nezumimochi)	T2	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	S	+2	12	11	+	+	+	+	+	+	+	+	+	11	+	+	11	12	.	.	11	11	+	
<i>Machilus thunbergii</i> Sieb. et Zucc. (Tabu)	T1,T2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	S,H	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	11	+	+	
<i>Symplocos lucida</i> Sieb. et Zucc. (Kuroki)	T2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	S	+	+	11	+	+	11	+	.	+	11	+	+	11	.	.	.	.	.	.	.	11	+
	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ficus erecta</i> Thunb. (Inubiwa)	T2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	S	+	11	+	+	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Eurya japonica</i> Thunb. (Hisakaki)	T2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	S,H	+	+	+2	.	+2	11	12	+	+	12	+	+	+	+	12	12	12	12	.	.	12	22	
<i>Trachelospermum asiaticum</i> Nakai (Teika-kazura)	H	+	+	+	11	11	+2	+	+	+	11	+	.	+	+	.	.	11	11	12	.	+2	+2	
	L	+	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Viburnum japonicum</i> Spreng. (Hakusanboku)	S	+	+	+	.	12	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ilex integra</i> Thunb. (Mochinoki)	T2	.	.	.	.	.	.	.	.	+	11	+	.	.	.	.	.	.	.	.	.	.	.
	S	+	+	.	.	11	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	.	
<i>Camellia japonica</i> Linn. (Yabu-tsubaki)	T2	.	.	.	.	11	.	.	.	12	11	+	+	+	+	.	11	.	.	.	.	.	.
	S	+	+	11	+	+	.	+	+	+	+	+	11	+	21	11	+	.	.	12	.	.	+2	
	H	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cinnamomum japonicum</i> Siebold. (Yabunikkei)	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
<i>Podocarpus macrophyllus</i> Lamb. (Inumaki)	T2,S	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Farfugium japonicum</i> Kitam. (Tsuwabuki)	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ophiopogon japonicus</i> Ker-Gawl. (Jyanohige)	H	+	+	+	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ardisia japonica</i> Blume (Yabukoji)	H	+2	+	.	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.
<i>Liriope platyphylla</i> Wang et Tang (Yaburan)	H	.	.	.	.	+	+	+	+	+	+	.	.	.	.	.	.	.	.	.	.	.	.
<i>Castanopsis cuspidata</i> Schottky (Shii)	T1	12	.	.	.	.	22	+	.	.	.	.	22	23	.	.	.	.	.	.	.	.	.
(includ. v. sieboldii Nakai)	T2	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	S	+	.	.	.	.	.	.	.	.	.	.	12	12	.	.	.	.	.	.	.	.	.
<i>Gardenia jasminoides</i> Ellis (Kuchinashi)	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Stauntonia hexaphylla</i> Decaisne (Mube)	H	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cymbidium goeringii</i> Reichb. (Shunran)	H	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Vaccinium bracteatum</i> Thunb. (Shashanpo)	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Hedera rhombea</i> Bean (Kizuta)	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Myrsine seguinii</i> Lev. (Taimin-tachibana)	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ilex rotunda</i> Thunb. (Kuroganemochi)	S	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Neolitsea sericea</i> Koidz. (Shirodamo)	S	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Dryopteris varia</i> (L.) O.Kuntze (Itachishida)	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Pittosporum tobira</i> Ait (Tobera)	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Quercus glauca</i> Thunb. (Arakashi)	T2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ternstroemia gymnanthera</i> Sprague (Mokkoku)	S	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Dryopteris erythrosora</i> O. Kuntze (Benishida)	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Fatsia japonica</i> Decne. et Planch. (Yatsude)	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Actinodaphne lancifolia</i> Meisn. (Kagonoki)	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Alpinia japonica</i> Miq. (Hanamyoga)	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Damnacanthus indicus</i> Gaertn. (Aridoshi)	H	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Kadsura japonica</i> Dunal. (Binan-kazura)	H	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Dendropanax trifidus</i> Makino (Kakuremino)	S	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Cleyera japonica</i> Thunb. (Sakaki)	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Camellia sasanqua</i> Thunb. (Sazanka)	S	.	.	.	.	11	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Daphniphyllum teijsmannii</i> Zoll. (Hime-uzuriha)	T2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Elaeagnus glabra</i> Thunb. (Tsurugumi)	S	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Woodwardia japonica</i> Smith (Oo-kaguma)	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Ardisia crenata</i> Sims (Manryo)	H	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Symplocos glauca</i> Koide. (Mimizubai)	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
<i>Helicia cochinchinensis</i> Lour. (Yamamogashi)	T2	.	.																					

8. Zu K. Saito vgl. im Text 「Vegetation und Landschaft Japans」 1979 (p.177-188)

Table 1 Summarized species composition of the subalpine coniferous forests in north Honshu

A: *Abies mariesii*-*Fagus crenata* community, B: *Abies mariesii*-*Tsuga diversifolia*-*Thujaopsis dolabrata* var. *hondai*-*Oplopanax japonicus* comm., C: *Abies mariesii*-*Tsuga diversifolia*-*Oplopanax japonicus* comm., D: *Abies mariesii*-*Oplopanax japonicus* comm., E: *Abies mariesii*-*Thujaopsis dolabrata* var. *hondai*-*Oplopanax japonicus* comm., F: *Abies mariesii*-mosses comm., G: *Abies mariesii*-*Betula ermanii*-*Oplopanax japonicus* comm., H: *Abies mariesii*-*Ilex sugerokii* var. *brevipedunculata*-*Oplopanax japonicus* comm., I: *Abies mariesii*-*Tsuga diversifolia*-*Ilex sugerokii* var. *brevipedunculata* comm., J: *Ibid.* (*Quercus mongolica* var. *undulatifolia* type), K: *Abies mariesii*-*Pinus pumila* comm., L: *Abies mariesii*-*Ilex sugerokii* var. *brevipedunculata* comm., M: *Pinus parvifolia* var. *pentaphylla*-*Abies mariesii*-*Osmundastrum cinnamomeum* comm., N: *Abies mariesii*-*Carex blepharicarpa* comm. (*Thuja standishii* type), O: *Ibid.* (*Quercus mongolica* var. *undulatifolia* type), P: *Ibid.* (*Pinus pumila* type), Q: *Thuja standishii*-*Abies mariesii*-*Ilex sugerokii* var. *brevipedunculata* comm., R: *Tsuga diversifolia*-*Abies mariesii*-*Pinus parvifolia* var. *pentaphylla* comm., S: *Tsuga diversifolia*-mosses comm., T: *Tsuga diversifolia*-*Thujaopsis dolabrata* var. *hondai*-(*Oplopanax japonicus*) comm., U: *Tsuga diversifolia*-*Oplopanax japonicus* comm.

Roman numerals indicate the presence grade of each species. Arabic numerals, in italics, show the dominance and, in Gothic, the number of the plots of occurrence. The asterisks in the bottom row of the table indicate the communities characterized by the thick moss cover.

Community types	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
Localities	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine	Hakkoda Zao Hayachine
Number of plots	7 14 10 8 1	22	18 10 7	15 4 9 14	11 4	4	20	12 22 15 2	7	6 11 8	6 18	11 8 8 9 2	9	9	11	18 10 7 6	6 6 15	6 11	6	12 12 1	13	7 6 6
Mean number of species	26 25 28 24 27	20	31 28 26	25 28 22 24	29	18	29	23 26 28 20	24	21 16 20	20 21	15 18 22 23 20	28	21	15	35 23 22 30	22 19 33	20 26	22	9 14 15	23	25 24 27
<i>Abies mariesii</i>	V V V V /	V V V V	V V V V	V 4 V V	V 4	V	V V V 33	V V V V	V V	V V V V 22	V V V	V V V V 22	V V V	V V	V V	V V V V	V V V	V V	V	V V V	V	V V V
<i>Betula ermanii</i>	II III III	V V V III	IV . . . III	IV . . . III	II	V	. III III 33	II III . III	. . .	IV . III . . .	II III . . .	IV . III . . .	II III . . .	. . .	. . .	. . .	. . .	. I	. . .	III III +	I III IV	II III V
<i>B. corylifolia</i>	I	IV III . .	. . . . .	. . . . .	II	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	I . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	III III +	III III . .	III III . .
<i>Tsuga diversifolia</i>	I	V V V V	V V V V	V	V .	I	II . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	V	IV . . . . .	. . . . .	. . . . .	. . . . .	I I . . .	V V	V V 5	V V V V	V V V V	V V V V
<i>Fagus crenata</i>	V V V V 3	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Thujaopsis dolabrata</i> var. <i>hondai</i>	. . . . .	V . . . . .	. . . . .	. . . . .	V .	. . . . .	. . . . .	. . . . .	II . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	V V .	V . . . .	. . . . .
<i>Thuja standishii</i>	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	III . . . . .	. . . . .	. . . . .	V IV	. . . . .	. . . . .	. . . . .	. . . . .
<i>Pinus parvifolia</i> var. <i>pentaphylla</i>	. . . . .	I . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	I . . . . .	. . . . .	. . . . .	V . . . . .	. . . . .	. . . . .	. . . . .	V III	III V V	III III	III III	III III
<i>Picea glehnii</i>	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Sorbus commixta</i>	II V V V V	V V V V	V 4 III V	IV 4	V	V V V V .	V V V V	V II	III V V V +/	IV V V	V V	III V V V +/	IV V V	V V	V III V V	III V V	III V V	IV V	V V V	V V V	V V V	V V V V
<i>Viburnum furcatum</i>	V V V V /	IV V V V	V 3 III V	V 3	V	V V V +/	V V V V	V V	II III V V +/	IV I III	V V V V	III III V V +/	IV I III	V V V V	III III V V	III III V	III III V	IV V	V . . +	V V V V	V V V V	V V V V
<i>Acer tachonokii</i>	V IV V IV 3	IV V V V	V 4 . V III	3	IV	I V . /	IV V V V V	V V	V III V V +/	V V V I	V V V V	V III V V +/	V V V I	V V V V	III III V V	III III V	III III V	V V V	V IV III	V III V	V III V	V III V
<i>Sasa kurilensis</i>	V V V V 3	II III V V	V 1 V V III	4	V	V V . 43	V V V V	V V	. V V V 53	V III V	V V V V	V V V V 53	V III V	V V V V	V V V V	V V V V	V V V V	V V V	V	V V V V	V V V V	V V V V
<i>Skimmia japonica</i> var. <i>repens</i>	IV III V +	II III .	IV . III I	4	IV	IV III . /	V III V V	V V	. III V V .	V . III V	V V	V III V V .	V III V	V . III V	V V V V	V V V V	V V V V	V IV V	V	III III V	III III V	III III V
<i>Mitanthemum japonicum</i>	V V V V 2	. V III V	V 2 V V III	3	V	V IV V +/	IV III V V	V III	III III V V .	IV III V	V III	III III V V .	IV III V	III III V	III III V	III III V	III III V	V V V	V . . +	III III V	III III V	III III V
<i>Tripteropyrum japonicum</i>	V V V V .	II V III V	III III V I	1	II	V III V .	III III V V	V III	III III V V +/	III III V	V III	III III V V +/	III III V	III III V	III III V	III III V	III III V	V III V	V I . . .	III III V	III III V	III III V
<i>Streptopus streptopoides</i> var. <i>japonicus</i> *	V V III V +	IV V V V	III III V V	4	V	V III V +/	V V V V	V III	III III V V +/	III III V	V III	III III V V +/	III III V	III III V	III III V	III III V	III III V	V III V	V I . . .	III III V	III III V	III III V
<i>Plagiogygia matsumureana</i>	V V III V +	IV III V V	III III V V	. . .	V	III V V +/	V III III	III V	. III V . .	III III V	III V	. III V . .	III III V	III III V	III III V	III III V	III III V	V III V	V	III III V	III III V	III III V
<i>Lycopodium serratum</i> var. <i>serratum</i>	III III I +	V V III V	III III V	III 3	III	V III V +/	V III V	III V	III III V +/	III III V	III V	III III V +/	III III V	III III V	III III V	III III V	III III V	V III V	V III V	III III V	III III V	III III V
<i>Polystichopsis mitica</i>	I IV III +	V V V V	III 4 V V	V 4	V	V III V +/	V III V	III V	V III V . .	III III V	III V	V III V . .	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V
<i>Acer ukurandense</i>	IV . III .	II V III V	III 2 III V	IV	V	V III V . .	III III V	III I	. III I +	III III V	III I	. III I +	III III V	III III V	III III V	III III V	III III V	I . .	I . .	III III V	I III V	I III V
<i>Rhododendron albrechtii</i>	II I V III .	V III V V	III III V	V .	I	I . III . .	III III V	III III	III III V +/	III III V	III III	III III V +/	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V
<i>Menisies pentandra</i>	III III . .	V V III V	III 4 V V	V 4	IV	V III . .	V V III III	III III	III III V +/	III III V	III III	III III V +/	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V
<i>M. multiflora</i>	. . . . .	I I III .	I 4 V .	I .	II	III . I . .	I III III	III I	. . III //	III III V	III III	. . III //	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V
<i>Vaccinium smallii</i>	. I III III .	III III V	III 4 I I	IV 3	IV	V III V . .	V III V III	III III	V III V +/	V III V III	III III	V III V +/	V III V III	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V
<i>V. yatabei</i>	I . III . .	I III III	I 3 III III	I 4	IV	V III V . .	V III III III	III III	V III V +/	V III V III	III III	V III V +/	V III V III	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V
<i>Rhododendron brachycarpum</i>	III I . IV .	III III V	III 4 I III	III 3	III	I III V +/	V III III III	III III	V III V +/	V III V III	III III	V III V +/	V III V III	III III V	III III V	III III V	III III V	V III V	V III V	III III V	III III V	III III V
<i>Ilex rugosa</i>	III . III . .	V V III V	III 4 III V	V 4	I	. III III .	III III V	III V I	III III V . /	III III V	III V I	III III V . /	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V	III III V
<i>Vaccinium ovalifolium</i>	. . III . .	III III III	. 4 I I I	IV 3	III	III III . .	V III III	III I	. III V +/	III III III	III I	. III V +/	III III III	III III III	III III III	III III III	III III III	III III III	III III III	III III III	III III III	III III III
<i>Coptis trifolia</i>	. I III . .	. III III	III 4 III III	I 4	IV	V III III .	V III III	III III	III III V . .	III III III	III III	III III V . .	III III III	III III III	III III III	III III III	III III III	III III III	III III III	III III III	III III III	III III III
<i>Heloniopsis orientalis</i>	I . III . .	. III III	III 3 III III	III .	III	III III +/	III III III	III III	III III V . .	III III III	III III	III III V . .	III III III	III III III	III III III	III III III	III III III	III III III	III III III	III III III	III III III	III III III
<i>Acer japonicum</i>	V V III V 2	III . III III	III . I . .	. . .	III	. III III . /	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	I . .	III III III	III III III	III III III	III III III
<i>Fraxinus lanuginosa</i> var. <i>serrata</i>	V I I III .	III III I .	I . . . .	. . .	. . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	I . .	. . . . .	III III III	III III III	III III III
<i>Prunus grayana</i>	IV III III +	I I I . .	. . . . .	. . .	I	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Magnolia salicifolia</i>	. IV III +	. . . . .	. . . . .	. . .	. . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Ilex leucoclada</i>	. IV V V +	. . . . .	. . . . .	. . .	I	. III I +/	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Hamamelis japonica</i> var. <i>obtusata</i>	. . . . .	. . . . .	. . . . .	. . .	. . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Quercus mongolica</i> var. <i>undulatifolia</i>	. . . . .	I . . . .	. . . . .	. . .	. . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Pinus pumila</i>	. . . . .	. . . . .	. . . . .	. . .	. . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Prunus nipponica</i>	. I	I I I III	I 4 III III	II 2	II	I III . . .	I III . . .	III I	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Sorbus matsumurae</i>	. . . . .	. I I III	. . . . .	. . .	. . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Oplopanax japonicum</i>	. IV III +	IV V III V	III 4 V V	V 1	V	III III V . .	. I I I .	I . .	. III V . .	. . . . .	. . . . .	. III V . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Oxalis acetosella</i>	I III I +	III III III	III 2 III V	V 2	IV	III I . . .	I I . . .	. I	V . . . . .	. . . . .	. . . . .	V . . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Clintonia udensis</i>	. . . . .	I V . III	III 2 V V	. . .	II	I III I +/	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .	. . . . .
<i>Trautvetteria japonica</i>	. I I I . .	. I III V	III 2 III .	. . .	IV	I												

Table 1. Deformation of *Abies* trees and some conditions of their habitats.

The vegetation types are shown as follows: Vs; volcanic scrub, Th; degraded forest, Of; thin forest, Df; thick forest. One tree was chosen as the sample of each locality shown in Figure 1, and its number corresponds to that in Figure 1.

No. of sample	Hight(m)	Hight of deformed part(m)	Deformation degree	Direction of deformation	Condition of habitat		
					Direction of slope	Inclination of slope(°)	Vegetation type
1	2.0		3	W10°N	E 5°N	5	Vs
2	1.5		3	N35°W	E15°S	20	Vs
3	1.0		3	W15°N	N20°E	12	Vs
4	2.5		3	W 5°S	E30°S	7	Vs
5	3.0	1.5	3	W15°S	E 5°N	13	Vs
6	5.0	2.0	3	W10°N	E15°S	15	Vs
7	1.0		3	W 0°	N20°W	15	Vs
8	1.5		3	W10°S	N20°W	15	Vs
9	1.5		3	W10°S	N20°W	15	Vs
10	1.5		3	W 0°		0	Vs
11	3.0		3	W 5°N	S 5°W	18	Vs
12	3.0		3	W10°N	S15°W	14	Vs
13	2.0		2	W20°N	E20°S	11	Vs
14	6.5	2.0	2	W 5°S	E15°S	21	Vs
15	1.0		3	W10°N	S10°E	30	Vs
16	6.0	2.0	3	W 5°N	N40°E	6	Th
17	5.0	1.5	3	W 5°N		0	Df
18	3.5	1.0	3	W30°N	S15°E	5	Vs
19	5.0	1.0	4	W40°N		0	Vs
20	5.5	2.0	3	W15°N		0	Vs
21	7.0	2.5	3	W30°N		0	Vs
22	5.0	2.0	3	W30°N		0	Df
23	8.0	3.0	1	W10°N	E 5°S	2	Df
24	4.5	2.0	4	W 0°	E20°S	6	Df
25	3.0		2	W10°N	N40°W	3	Df
26	3.0		4	W 0°	W20°N	12	Df
27	6.5	3.5	3	W 5°N		0	Df
28	4.0	1.5	1	W 0°		0	Df
29	5.0	2.0	4	W 0°	N 5°E	5	Df
30	5.5	3.5	3	W 0°	N 5°E	22	Df
31	7.5	4.0	3	W10°N	N15°E	23	Df
32	7.0	4.5	3	W10°N	N30°W	3	Th
33	5.0	3.5	3	W20°S	N 5°E	2	Th
34	2.0	1.0	4	W10°N		16	Th
35	5.0		4	W10°N	S45°W	13	Th
36	2.0	1.0	4	W15°N	S30°E	3	Th
37	4.0	2.0	4	W15°N	W20°N	3	Th
38	6.0	3.0	3	W35°N	S20°E	13	Th
39	6.0	2.0	4	W35°N	S30°E	13	Th
40	8.0	4.0	3	W25°N	S25°E	25	Th
41	8.0	3.0	2	W30°S	S10°E	12	Of
42	10.0	4.0	1	W 5°N	S25°E	9	Of
43	10.5	4.5	1	W 0°	S45°E	5	Df
44	4.0	2.5	2	W15°S	E40°S	2	Df
45	6.0	2.5	3	W 0°		0	Th
46	5.0	2.0	3	W20°S		0	Th
47	5.0	2.0	3	W10°N		0	Th
48	5.5	2.5	3	W 0°	E 0°	2	Th
49	11.5	6.0	2	S45°W	E20°N	8	Df
50	2.5		3	W40°N	W20°N	11	Vs
51	2.5		4	W40°N	W20°S	21	Vs
52	2.5		4	N45°W	W20°S	21	Vs
53	2.0		3	W35°N	W40°S	18	Vs
54	2.5		2	W30°S	W10°N	15	Vs
55	2.5		2	W20°N	W10°N	6	Vs
56	3.5	1.5	2	N40°W	E40°S	8	Vs
57	4.0		2	W30°N	E40°S	0	Of
58	4.5		2	W40°N		0	Vs
59	3.5		2	W15°S		0	Vs
60	9.0	3.0	3	W25°N	E 0°	1	Of
61	2.5		3	W15°N		0	Of
62	4.0		1	N20°W		0	Of
63	3.0		2	W20°N	S45°E	5	Of
64	5.0		2	N45°W	S45°E	5	Of
65	7.0	4.5	2	W15°S	N45°W	17	Of
66	13.5	3.0	1	N45°W	E35°S	21	Of
67	8.5	4.5	2	W10°S	E40°S	18	Of
68	7.0	3.0	1	W15°S	S 5°E	12	Df
69	8.0	3.0	1	W25°N		0	Df
70	8.5	3.0	1	W 0°	E25°S	5	Df
71	9.0	3.0	2	W10°S	E10°S	2	Df
72	7.0	3.0	1	S16°W		0	Df
73	10.5	4.0	2	N30°W	E30°N	2	Df
74	7.5	3.5	1	W 5°S	E10°N	5	Df
75	10.0	3.0	1	W30°N		0	Df
76	14.5	6.0	1	S25°W	E10°N	12	Df
77	15.0	5.0	1	W 0°	E 0°	8	Of
78	4.0	3.0	1	W20°S	E 5°N	11	Of
79	8.0	4.0	1	W 0°	E 0°	15	Of
80	6.0	3.0	1	W 0°		0	Of
81	7.0	4.5	1	W 0°		0	Of
82	7.5	3.0	2	N25°W	E30°S	12	Of
83	10.0	4.0	2	W15°N	S 0°	40	Of
84	11.0	3.5	1	W30°N	S 0°	30	Of
85	10.0	4.0	2	N20°W	S10°W	50	Of
86	12.0	3.0	2	N35°W	S20°W	35	Of
87	10.0	3.5	2	W15°N	S 0°	30	Of
88	9.0	3.0	2	N 5°W	S45°E	20	Of
89	13.0	3.5	1	N45°E	S20°E	17	Of
90	8.5	4.0	1	S35°W	N20°W	5	Df
91	5.5	2.0	1	S35°W	W20°S	5	Df
92	9.0	3.0	2	S20°W	W35°N	7	Df
93	12.0	3.0	3	W 0°	W25°N	18	Df
94	9.0	3.0	2	W 5°N	N45°W	19	Df
95	6.0	3.0	3	W 0°	N25°W	11	Df
96	6.0	3.0	4	W25°N	N45°W	12	Th
97	5.0	3.0	4	W 5°N	E30°S	11	Th
98	8.0	5.0	3	W10°N	S40°E	17	Of
99	4.5	3.0	3	W 5°S	S45°E	12	Of
100	5.0		3	N45°W	E20°N	12	Of
101	6.5	3.5	3	N10°S	S10°E	22	Of
102	3.0		3	W 5°S	S20°E	15	Of
103	14.0	6.0	1	W 5°N	E 0°	15	Of

Tabelle 1. Lonicera - Ulmetum japonicae

Nr. d. Aufnahme:	1	2	3	4	5	6	7	8	9	10	
Datum d. Aufnahme:	'78	'72		'77				'68			
	5	6	"	7	"	"	"	9	"	"	
	24	26		7				30			
Größe d. Probefläche (m ²):	400	400	400	400	300	400	400	200	200		
Höhe d. Baumschicht-1 (m):	28	28	22	26	25	23	25	22	18	15	
Deckung d. Baumschicht-1 (%):	60	80	70	85	90	80	85	50	70	60	
Höhe d. Baumschicht-2 (m):	8	12	10	12	12	12	12	10	10	10	
Deckung d. Baumschicht-2 (%):	40	60	40	30	30	40	40	30	60	80	
Höhe d. Strauchschicht (m):	3.5	5	4	4	4	4	3	4	3	3	
Deckung d. Strauchschicht (%):	50	40	40	20	30	30	30	80	40	50	
Höhe d. Krautschicht (m):	1	0.9	0.8	0.8	0.8	0.8	1	1	1	1	
Deckung d. Krautschicht (%):	90	80	80	70	90	80	90	80	80	70	
Artenzahl:	63	55	64	68	74	65	74	54	63	64	
Kenn- u. Trennarten d. Ass.:											
<i>Lonicera vidalii</i>	S	2.3	2.2	3.3	1.2	1.2	2.2	2.2	1.2	3.3	1.2
	K	2.3	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
<i>Viola takedana</i>	K	+	+	+	+	+	+	+	+	+	+
<i>Asprella longearistata</i>	K	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.2	2.2	2.2
<i>Viola hondoensis</i>	K	+	+	1.2	1.2	+	+	2.2	+	+	+
<i>Trillium tschonoskii</i>	K	2.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
<i>Athyrium conilii</i>	K	+	+	+	+	+	+	+	+	+	+
<i>Cacalia yatabei</i>	K	2.2	2.2	1.2	2.2	1.2	1.2	1.2	1.2	1.2	1.2
<i>Geranium tripartitum</i>	K	+	+	+	+	+	+	+	+	+	+
<i>Pseudostellaria palibiniana</i>	K	+	+	+	+	+	+	+	+	+	+
Zeigerarten von Frühringsaspekt:											
<i>Galium kikumugura</i>	K	1.2	+	1.2	1.2	1.2	1.2	2.3	+	+	+
<i>Paeonia japonica</i>	K	1.2	+	+	+	+	+	+	+	+	+
<i>Convallaria keiskei</i>	K	+	1.1	1.2	1.2	+	2.2	1.2	+	+	+
<i>Lilium cordatum</i>	K	+	+	+	+	+	+	+	+	+	+
<i>Pelocarpus carnosus</i>	K	+	+	+	+	+	+	+	+	+	+
<i>Trigonotis guilielmi</i>	K	+	+	+	1.2	+	+	+	+	+	+
Kenn- u. Trennarten d. Verbandes:											
<i>Ulmus japonica</i>	B-1	3.3	2.2	3.3	4.3	4.3	5.4	3.3	2.2	4.3	
	B-2	+	+	+	+	2.2	+	+	1.1	1.2	
	S	+	+	+	+	+	+	+	+	+	
	K	+	+	+	+	+	+	+	+	+	
<i>Schisandra chinensis</i>	S	+	+	+	+	+	+	+	3.3	+	
	K	2.2	1.2	2.2	1.2	1.2	2.2	1.2	1.2	+	+
<i>Cimicifuga simplex</i>	K	1.1	+	1.2	+	+	+	+	+	+	+
<i>Sanicula chinensis</i>	K	+	+	+	1.2	1.2	+	1.2	1.2	+	+
<i>Rubia akane</i>	K	+	+	+	+	1.2	1.2	+	+	+	+
<i>Fraxinus mandshurica</i> var. <i>japonica</i>	B-2	+	+	+	+	1.2	+	1.1	+	+	
	S	+	+	+	+	+	+	+	+	+	
	K	+	+	1.1	+	+	+	1.1	+	+	
<i>Geum japonicum</i>	K	+	+	+	+	+	+	+	+	+	
<i>Viburnum opulus</i> var. <i>calvescens</i>	S	+	1.1	+	+	+	+	+	+	+	
<i>Milium effusum</i>	K	+	+	+	+	+	+	+	+	+	
<i>Impatiens noli-tangere</i>	K	+	+	+	+	+	3.3	+	+	+	
Kenn- u. Trennarten d. Ordn.:											
<i>Dryopteris crassirhizoma</i>	K	1.2	1.1	1.2	2.2	4.3	1.2	2.2	3.4	2.2	4.4
<i>Matteuccia struthiopteris</i>	K	1.2	3.3	3.3	1.1	2.2	2.2	1.2	3.3	3.4	+
<i>Phryma leptostachya</i> var. <i>asiatica</i>	K	1.2	+	+	1.2	1.2	2.2	1.2	1.2	1.2	+
<i>Chamaele decumbens</i>	K	1.2	1.2	+	+	+	+	1.2	1.2	+	+
<i>Cercidiphyllum japonicum</i>	B-1	1.1	1.1	+	2.1	1.1	1.1	+	3.3	2.1	+
	B-2	+	+	+	+	+	+	+	+	1.2	+
	S	+	+	+	+	+	+	+	+	+	+
<i>Cacalia delphinifolia</i>	K	1.2	2.3	+	1.2	1.2	1.2	2.3	1.2	2.2	
<i>Athyrium pycnosorum</i>	K	+	+	+	+	+	+	+	+	+	
<i>Panax japonicus</i>	K	+	+	+	+	+	+	+	+	+	
<i>Galium pseudo-aspellum</i>	K	+	1.2	+	+	+	+	1.2	+	+	
<i>Acer cissifolium</i>	B-1	+	+	+	+	+	+	+	+	2.1	
	B-2	2.2	+	+	+	1.2	+	+	2.2	2.2	2.3
	S	+	+	+	+	+	+	1.2	+	2.3	
<i>Caulophyllum robustum</i>	K	2.2	1.2	+	+	2.3	+	+	+	1.2	
<i>Arisaema takedae</i>	K	+	+	+	+	+	+	+	+	+	
<i>Galium japonicum</i>	K	+	+	+	+	+	+	1.2	+	+	
<i>Cacalia hastata</i> var. <i>orientalis</i>	K	+	+	+	+	+	+	+	1.2	+	
<i>Phellodendron amurense</i>	B-1	+	+	+	+	+	+	+	+	2.1	
Kenn- u. Trennarten d. Klasse:											
<i>Magnolia kobus</i>	B-2	+	+	2.2	+	+	1.1	+	+	1.2	
	S	1.2	+	+	+	+	+	+	+	+	
<i>Euonymus fortunei</i>	B-2	+	+	1.2	+	+	+	+	+	+	
	K	1.2	1.1	+	1.2	1.2	2.2	+	+	1.2	+
<i>Carex sachalinensis</i>	K	2.3	2.3	1.2	1.2	1.2	2.2	1.2	2.3	3.3	2.2
<i>Smilacina japonica</i>	K	+	+	+	+	+	+	+	+	1.2	1.2
<i>Cornus controversa</i>	B-1	+	+	2.2	+	+	+	+	+	+	+
	B-2	+	2.2	+	+	+	+	1.2	+	1.2	+
	S	+	+	+	+	+	+	2.2	+	1.2	+
	K	+	+	+	+	+	+	+	+	+	+
<i>Acer palmatum</i> var. <i>amoenum</i>	B-1	+	+	+	+	2.1	+	+	+	+	
	B-2	+	+	+	+	+	+	+	2.3	2.2	+
	S	+	+	+	+	+	+	+	+	1.2	2.2
<i>Acanthopanax spinosus</i>	S	+	+	+	+	+	+	+	+	1.2	
	K	+	+	+	+	+	+	+	+	+	
<i>Symplocos chinensis</i> var. <i>leucocarpa</i> f. <i>pilosa</i>	S	2.2	+	+	+	1.2	1.2	1.2	+	+	1.2
	K	+	+	1.1	+	+	+	+	+	+	
<i>Rhus ambigua</i>	B-2	+	+	+	+	+	+	+	+	+	
	K	+	+	+	+	+	+	+	+	+	
<i>Acer mono</i> s.l.	B-1	+	+	1.1	+	+	1.1	+	+	3.3	
	B-2	2.2	2.2	1.2	+	+	+	+	+	2.2	
	S	1.2	1.2	1.1	+	+	+	+	+	2.2	2.2
	K	+	+	+	+	+	+	+	+	+	1.2
<i>Viburnum plicatum</i> var. <i>tomentosum</i>	S	+	+	+	+	+	+	+	+	+	1.2
	K	+	+	+	+	+	+	+	+	+	
<i>Lonicera gracilipes</i> var. <i>glandulosa</i>	S	1.2	1.2	+	+	+	+	+	+	+	
	K	+	+	1.2	+	+	+	+	+	+	
<i>Schizophragma hydrangeoides</i>	B-2	+	+	+	+	+	+	+	+	+	
	S	+	+	+	+	+	+	+	+	+	
	K	+	+	+	+	+	+	+	+	+	
<i>Berberis thunbergii</i>	S	+	+	+	+	+	+	+	+	+	
	K	+	+	+	+	+	+	+	+	+	
<i>Acer nikoense</i>	B-2	+	+	1.2	+	+	+	+	+	+	
	S	1.1	+	+	+	2.2	+	+	1.2	2.2	2.2
	K	1.2	+	+	+	+	+	+	+	+	1.2
<i>Euonymus sieboldianus</i> var. <i>nikoensis</i>	B-2	+	+	+	+	+	+	+	+	+	
	S	1.1	+	+	+	+	+	+	+	+	1.2
<i>Ligustrum tschonoskii</i>	S	+	1.2	+	+	+	1.2	+	+	+	+
<i>Prunus grayana</i>	B-1	+	+	+	+	+	+	+	+	2.1	
	B-2	+	+	+	+	+	+	+	+	+	
	S	+	+	+	+	+	+	+	+	+	1.1
<i>Quercus mongolica</i> var. <i>grosseserrata</i>	B-1	+	+	+	+	+	+	+	+	2.1	
	K	+	+	+	+	+	+	+	+	1.2	+
<i>Carpinus cordata</i>	B-1	+	+	1.2	1.2	+	2.1	+	+	+	
	B-2	+	+	+	+	+	1.2	+	+	+	
<i>Prunus maximowiczii</i>	B-2	+	1.1	+	+	+	+	+	+	+	
	K	+	+	+	+	+	+	+	+	+	
<i>Athyrium vidalii</i>	K	+	+	+	+	+	+	+	+	+	
<i>Acer mono</i> var. <i>ambiguum</i>	B-1	2.1	+	+	+	+	+	+	+	+	
	B-2	+	+	+	+	+	+	+	+	+	
	S	+	+	+	+	+	+	+	+	+	
<i>Paris tetraphylla</i>	K	+	+	+	+	+	+	+	+	+	
<i>Hydrangea petiolaris</i>	B-2	+	+	+	+	+	+	+	+	+	
	S	+	+	+	+	+	+	+	+	+	
<i>Kalopanax pictus</i>	B-1	+	2.1	2.1	+	+	+	+	+	+	
<i>Euonymus oxyphyllum</i>	S	+	+	+	+	+	1.2	+	+	+	
<i>Corylus sieboldiana</i>	S	+	+	+	+	+	+	+	+	+	
<i>Magnolia obovata</i>	B-1	+	1.1	+	+	1.1	+	+	+	+	
Begleiter:											
<i>Vitis coignetiae</i>	B-2	+	+	+	+	+	+	+	+	+	2.3
	S	+	+	+	+	+	+	+	1.2	1.2	
	K	+	+	+	+						

Tabelle 2. Übersichtstabelle der japanischen Ulmen Gesellschaften

Nr. d. Vegetationseinheiten:	1	2	3	4	5	6	7	8	9	10	11	12	13	
Zahl d. Aufnahmen:	10	4	2	6	4	13	14	5	5	8	19	-	10	
Kenn- u. Trennarten d. Ass. A:														
<i>Lonicera vidalii</i>	V	.	.	.	.	.	.	.	.	.	.	.	.	Onihyotanboku
<i>Viola takedana</i>	V	.	.	.	.	.	.	.	.	.	.	.	.	Hinasumire
<i>Viola hondoensis</i>	V	.	.	.	.	.	.	.	.	.	.	.	.	Aoisumire
<i>Acanthopanax spinosus</i>	V	.	.	.	.	.	.	.	.	.	.	.	.	Yamaokogi
<i>Asprella longearistata</i>	V	.	.	.	.	.	.	.	.	.	.	.	.	Azumagaya
<i>Acer palmatum</i> var. <i>amocnum</i>	V	.	.	.	.	.	.	.	.	.	.	.	.	Omomiji
<i>Rubia akane</i>	IV	.	.	.	.	.	.	.	.	.	.	.	.	Akane
<i>Trillium tschonoskii</i>	IV	.	.	.	.	.	.	.	.	.	.	.	.	Niyamaenreisô
<i>Athyrium conilii</i>	IV	.	.	.	.	.	.	.	.	.	.	.	.	Hosobashikeshida
<i>Cacalia yatabei</i>	IV	.	.	.	.	.	.	.	.	.	.	.	.	Yamataimngasa
<i>Acer nikoense</i>	III	.	.	.	.	.	.	.	.	.	.	.	.	Megusurinoki
<i>Geranium tripartitum</i>	III	.	.	.	.	.	.	.	.	.	.	.	.	Kofuro
<i>Cirsium nipponicum</i> var. <i>incomptum</i>	III	.	.	.	.	.	.	.	.	.	.	.	.	Taiazami
<i>Lilium cordatum</i>	III	.	.	.	.	.	.	.	.	.	.	.	.	Ubayuri
Gemeinsam vorkomm. Arten d. Ass. A. u. E.:														
<i>Cercidiphyllum japonicum</i>	V	.	.	.	.	.	.	.	.	III	II	.	.	Katsura
<i>Phryma leptostachya</i> var. <i>asiatica</i>	V	.	.	.	.	.	.	.	.	I	V	.	.	Haedokusô
<i>Cacalia delphinifolia</i>	V	.	.	.	.	.	.	.	.	I	III	.	.	Momijigasa
<i>Schisandra chinensis</i>	V	.	.	.	.	.	.	.	.	II	II	.	.	Chôsenjomishi
<i>Acer cissifolium</i>	IV	.	.	.	.	.	.	.	.	I	I	.	.	Mitsudekaede
<i>Carpinus cordata</i>	II	.	.	.	.	.	.	.	.	II	III	.	.	Sawashiba
<i>Chamaele decumbens</i>	V	.	.	.	.	.	.	.	.	.	IV	.	.	Sentôsô
Kenn- u. Trennarten d. Ass. B:														
<i>Salvia lutescens</i> var. <i>crenata</i>	.	2	2	IV	.	.	.	.	.	.	.	.	.	Kenatsunotamurasô
<i>Geum macrophyllum</i> var. <i>sachalinense</i>	.	2	2	IV	.	.	.	.	.	.	.	.	.	Karafutodaikonsô
<i>Symplocarpus nipponicus</i>	.	2	IV	.	.	.	.	.	.	.	.	.	.	Himezazensô
<i>Anemone stolonifera</i>	.	2	III	.	.	.	.	.	.	.	.	.	.	Sanrinsô
<i>Ligularia dentata</i>	.	1	V	.	.	.	.	.	.	.	.	.	.	Marubadakebuki
<i>Veratrum stamineum</i>	.	1	IV	.	.	.	.	.	.	.	.	.	.	Kobaikei
<i>Betula ermanii</i>	.	1	IV	.	.	.	.	.	.	.	.	.	.	Dakekanba
<i>Clinopodium gracile</i> var. <i>latifolium</i>	.	1	III	.	.	.	.	.	.	.	.	.	.	Hirohayamatôbana
Kenn- u. Trennarten d. Ass. C:														
<i>Viburnum sieboldii</i> var. <i>obovatifolium</i>	.	.	.	.	2	IV	.	.	.	.	.	.	.	Marubagomagi
<i>Carex planiculmis</i>	.	.	.	.	2	IV	.	.	.	.	.	.	.	Hikageshirasuge
<i>Rubia hexaphylla</i>	.	.	.	.	1	IV	.	.	.	.	.	.	.	Ôkane
<i>Carpesium matsuei</i>	.	.	.	.	3	II	.	.	.	.	.	.	.	Nopporogankubisô
<i>Sambucus sieboldiana</i> var. <i>microsperma</i>	.	.	.	.	1	III	.	.	.	.	.	.	.	Miyamaniwatoko
<i>Cirsium inudatum</i>	.	.	.	.	2	I	.	.	.	.	.	.	.	Tachiazami
<i>Viola keiskei</i> f. <i>okuboi</i>	.	.	.	.	3	.	.	.	.	.	.	.	.	Komarubasumire
<i>Sasa palmata</i>	.	.	.	.	.	V	.	.	.	.	.	.	.	Chimakizasa
<i>Dioscorea quinqueloba</i>	.	.	.	.	.	III	.	.	.	.	.	.	.	Kaededokoro
Kenn- u. Trennarten d. Ass. D:														
<i>Aconitum japonicum</i>	.	.	.	.	.	.	II	III	III	.	.	.	.	Okutorikabuto
<i>Hydrangea macrophylla</i> var. <i>megacarpa</i>	.	.	.	.	.	.	V	I	II	.	.	.	.	Ezoajisai
<i>Smilax nipponica</i>	.	.	.	.	.	.	II	III	II	.	.	.	.	Tachishide
<i>Stegogramma pozoi</i> subsp. <i>mollissima</i>	.	.	.	.	.	.	III	II	I	.	.	.	.	Mizoshida
<i>Astilbe thunbergii</i> var. <i>congesta</i>	.	.	.	.	.	.	II	I	II	.	.	.	.	Toriashishôma
<i>Tripterospermum japonicum</i>	.	.	.	.	.	.	II	I	II	.	.	.	.	Tsururindô
<i>Disporum smilacinum</i>	.	.	.	.	.	.	III	II	.	.	.	.	.	Chigoyuri
<i>Cacalia hastata</i> var. <i>tanakae</i>	.	.	.	.	.	.	I	V	.	.	.	.	.	Inudôna
<i>Cacalia farfaraefolia</i> var. <i>bulbifera</i>	.	.	.	.	.	.	I	IV	.	.	.	.	.	Tamabuki
<i>Polystichum retrosopaleaceum</i>	.	.	.	.	.	.	I	IV	.	.	.	.	.	Sakageinode
<i>Viola vaginata</i>	.	.	.	.	.	.	I	III	.	.	.	.	.	Sumiresaishin
<i>Oplismenus undulatifolius</i>	.	.	.	.	.	.	V	III	.	.	.	.	.	Kechizimizasa
<i>Liparis kumokiri</i>	.	.	.	.	.	.	II	IV	.	.	.	.	.	Kumokirisô
<i>Carex stenostachys</i> var. <i>cuneata</i>	.	.	.	.	.	.	II	III	.	.	.	.	.	Michinokuhonmonjisuge
<i>Viola rostrata</i> var. <i>japonica</i>	.	.	.	.	.	.	V	.	.	.	.	.	.	Nagahashisumire
<i>Amphicarpaea trisperma</i>	.	.	.	.	.	.	IV	.	.	.	.	.	.	Yabunome
<i>Achyranthes japonica</i>	.	.	.	.	.	.	III	.	.	.	.	.	.	Inokozuchi
<i>Ligularia stenocephala</i>	I	.	.	.	.	.	.	V	.	.	.	.	.	Metakarakô
<i>Sceptridium ternatum</i>	.	.	.	.	.	.	.	IV	.	.	.	.	.	Fuyunohanawarabi
<i>Carex doiana</i>	.	.	.	.	.	.	.	III	.	.	.	.	.	Shirasuge
<i>Polygonum cuspidatum</i>	.	.	.	.	.	.	.	III	.	.	.	.	.	Itadori
Gemeinsam vorkomm. Arten d. Ass. C u. D:														
<i>Galium trifloriforme</i>	.	.	.	.	2	III	II	IV	.	.	.	.	.	Okukurumamugura
<i>Aesculus turbinata</i>	.	.	.	.	IV	.	V	IV	I	.	.	.	.	Tochinoki
<i>Ilex crenata</i> var. <i>paludosa</i>	.	.	.	.	1	II	V	.	II	.	.	.	.	Hainutsuge
<i>Clinopodium micranthum</i>	.	.	.	.	2	I	.	IV	.	.	.	.	.	Inutôbana
<i>Pterocarya rhoifolia</i>	.	.	.	.	II	.	V	IV	.	.	.	.	.	Sawagurumi
<i>Dioscorea tokoro</i>	.	.	.	.	I	.	II	III	.	.	.	.	.	Onidokoro
Kenn- u. Trennarten d. Ass. E:														
<i>Carex rhynchophylla</i>	.	.	.	.	.	.	.	.	.	II	II	v	III	Ôkasasuge
<i>Alnus hirsuta</i>	.	.	.	.	.	.	.	.	.	II	I	II	I	Keyamahannoki
<i>Equisetum hiemale</i>	.	.	.	.	.	.	.	.	.	II	I	.	.	Tokusa
<i>Sasa senanensis</i>	.	.	.	.	.	.	.	.	I	IV	.	v	.	Kumazasa
<i>Trillium kamschaticum</i>	.	.	.	.	.	.	.	.	.	III	v	II	.	Ôbananoenreisô
<i>Athyrium sinense</i>	.	.	.	.	.	.	.	.	.	II	.	v	.	Ezomeshida
<i>Urtica platyphylla</i>	.	.	.	.	.	.	.	.	.	I	.	II	.	Ezoairakusa
<i>Spiraea salicifolia</i>	.	.	.	.	.	.	.	.	.	I	.	II	.	Hozakishimotsuke
<i>Carex vesicaria</i>	.	.	.	.	.	.	.	.	.	III	III	.	.	Oninarukosuge
<i>Sasa apoiensis</i>	.	.	.	.	.	.	.	.	.	IV	.	.	.	Ezomiyakozasa
<i>Aconitum yesoense</i>	.	.	.	.	.	.	.	.	.	.	IV	.	.	Ezotorikabuto
<i>Polystichum tripterum</i>	.	.	.	.	.	.	.	.	.	.	.	v	.	Jûmonjishida
<i>Salix pet-sus</i>	.	.	.	.	.	.	.	.	.	.	.	.	III	Ezonokinuyanagi
<i>Prunus padus</i>	.	.	.	.	.	.	.	.	.	.	.	.	III	Ezonouwanizuzakura
<i>Euonymus macropterus</i>	.	.	.	.	.	.	.	.	.	.	.	.	III	Hirohatsuribana
Gemeinsam vorkomm. Arten d. Ass. A,B,C u. D:														
<i>Euonymus fortunei</i>	V	3	1	V	1	V	I	V	III	.	I	.	.	Tsurumasaki
<i>Ligustrum tschonoskii</i>	III	3	2	V	4	V	I	IV	V	.	.	.	.	Miyamaibota
<i>Sambucus sieboldiana</i>	II	3	2	IV	.	.	IV	IV	IV	.	.	.	.	Niwatoko
<i>Prunus grayana</i>	III	1	I	.	III	.	III	I	I	.	.	.	.	Uwamizuzakura
<i>Dioscorea nipponica</i>	III	.	IV	.	2	I	.	V	III	.	.	.	.	Uchiwadokoro
<i>Symplocos chinensis</i> var. <i>leucocarpa</i> f. <i>pilosa</i>	IV	.	.	.	1	V	.	II	III	.	.	.	.	Sawafutagi
<i>Aconitum japonicum</i> var. <i>montanum</i>	II	1	IV	.	.	.	III	.	.	.	.	.	.	Yamatorikabuto
<i>Smilax riparia</i>	III	.	IV	.	.	.	I	III	.	.	.	.	.	Shiode
Arten d. Japanische-Meer-Florenelementes:														
<i>Viola kusanoana</i>	.	4	2	IV	3	III	.	IV	.	.	.	.	.	Ôtachtibusosumire
<i>Elatostemma umbellatum</i> var. <i>majus</i>	.	3	1	IV	2	II	.	I	.	.	.	.	.	Uwabamisô
<i>Cirsium nipponicum</i>	.	.	2	IV	.	.	III	IV	IV	.	.	.	.	Nanbuazami
<i>Oxalis griffithii</i>	.	1	2	V	.	.	II	I	.	.	.	.	.	Miyamakatabami
<i>Viburnum plicatum</i> var. <i>glabrum</i>	.	.	1	IV	1	.	II	V	.	.	.	.	.	Kenashiyabudemari
<i>Chelonopsis moschata</i>	.	.	1	IV	1	.	I	I	.	.	.	.	.	Jakôsô
<i>Carex dolichostachya</i> var. <i>glaberrima</i>	.	.	2	V	.	.	IV	II	.	.	.	.	.	Miyamakansuge
<i>Allium victorialis</i> var. <i>platyphyllum</i>	.	1	2	V	.	.	III	.	.	.	.	.	.	Gyôjanninniku
Gemeinsam vorkomm. Arten d. Ass. D u. E:														
<i>Cardamine leucantha</i>	.	.	.	.	.	.	.	II	II	III	IV	IV	II	Konronsô
<i>Morus bombycis</i>	.	.	.	.	.	.	II	IV	III	II	IV	v	II	Yamaguwa
<i>Petasites japonicus</i> var. <i>giganteus</i>	.	.	.	.	.	.	I	IV	II	II	III	v	.	Akitabuki
<i>Acer palmatum</i> var. <i>matsumurae</i>	.	.	.	.	.	.	IV	I	III	II	IV	v	.	Yamamomiji
<i>Magnolia kobus</i> var. <i>borealis</i>	.	.	.	.	.	.	V	.	.	II	III	v	II	Kitakobushi
<i>Codonopsis lanceolata</i>	.	.	.	.	.	.	II	.	II	I	II	III	.	Tsurunjinjin
<i>Maianthemum dilatatum</i>	I	.	.	.	.	.	III	II	.	.	I	v	II	Maizurusô
<i>Arisaema peninsulale</i>	.	.	.	.	.	.	I	IV	I	.	II	.	I	Kô

Tab. 1 Übersichtstabelle der Pterocarion rhoifoliae in JAPAN

Main table with columns for species (i-xxi) and presence/absence (0-1) across various sites. Includes sub-tables for 'a' and 'b' at the top.

Found. und Untersuchungen in Stütigkeitstabellen: 調査地と調査者. List of 58 numbered entries with locations and researchers.

Tab. 1. Übersichtstabelle des Aphananthe-Celtidetum japonicae in W-Japan.

Spalte:	a = Elaeocarpus ellipticus					b = Typische Subass.					c = Nanocnidetosum japonicae		d	
	1	2	3	4	5	6	7	8	9	10	11	12		
Laufende Nr.:	3	4	3	1	4	1	8	8	13	4	1	13		
Zahl der Aufnahmen:	33	30	32	26	42	24	30	29	43	46	45	50		
<u>Assoziations- u. Verbandskennarten:</u>														
<i>Celtis sinensis</i> v. <i>japonica</i>	2 ¹⁻²	1 ⁺	1 ⁺	1 ³	4 ³⁻⁴	1 ²	V ⁺²	V ⁺²	III ⁺⁴	4 ⁺²	1 ³	V ³⁻⁵		
<i>Aphananthe aspera</i>	3 ¹⁻⁴	4 ²⁻⁵	3 ³⁻⁵	1 ³	4 ⁺³	1 ¹	V ¹⁻⁵	V ¹⁻⁴	V ⁺⁴	.	1 ⁵	V ¹⁻⁴		
<u>Trennart der Assoziation:</u>														
<i>Reineckea carnea</i>	.	.	1 ⁺	.	4 ⁺²	1 ⁺	III ⁺	.	IV ⁺¹	3 ¹⁻⁴	.	IV ⁺²		
<u>Trennarten der Subassoziationen:</u>														
<i>Elaeocarpus sylvestris</i> v. <i>ellipticus</i>	3 ¹⁻²	.	.	.	.	.	.	.	.	.	.	.
<i>Distylium racemosum</i>	3 ⁺³	.	.	.	.	.	.	.	.	.	.	.
<i>Viburnum japonicum</i>	3 ⁺		
<i>Symplocos lucida</i>	2 ⁺¹	.	.	.	.	.	.	.	.	.	.	.
<i>Xylosma congestum</i>	2 ⁺		
<i>Pteris dispar</i>	2 ⁺¹	.	.	.	.	.	.	.	.	.	.	.
<i>Zelkova serrata</i>	.	.	.	.	.	1 ¹	V ⁺⁴	V ⁺¹	V ⁺⁵	4 ³⁻⁵	.	I ¹
<u>Regionale Trennarten der Subassoziation:</u>														
<i>Carex ischnostachya</i>	.	.	.	.	.	.	IV ⁺	.	.	.	1 ⁺	.
<i>Sapindus mukorossi</i>	.	.	.	.	.	.	III ⁺²	.	.	.	.	.
<i>Callicarpa japonica</i>	.	1 ⁺	.	.	1 ⁺	.	.	V ⁺	II ⁺	.	.	.		
<i>Ilex pedunculosa</i>	.	.	.	.	.	.	.	V ⁺¹	.	.	.	.
<i>Dendropanax trifidus</i>	.	.	.	.	.	.	.	IV ⁺¹	I ⁺	.	.	.
<i>Arundinaria pygmaea</i>	.	.	.	.	.	.	.	IV ⁺¹	.	.	.	.
<i>Carex spec.</i>	.	.	.	.	.	.	.	IV ⁺		
<i>Cryptomeria japonica</i>	.	.	.	.	.	.	.	.	IV ⁺⁴	1 ⁺	.	.
<i>Cocculus trilobus</i>	.	.	.	.	.	.	.	.	III ⁺	.	.	.
<i>Rhus ambigua</i>	.	.	.	.	.	.	.	.	III ⁺	.	.	.
<i>Magnolia kobus</i>	.	.	.	.	.	.	.	.	.	4 ⁺²	.	.
<i>Staphylea bumalda</i>	.	.	.	.	.	.	.	.	.	3 ⁺²	.	I ⁺
<i>Dicliptera japonica</i> v. <i>subrotunda</i>	.	.	.	.	.	.	.	.	.	3 ⁺	.	.
<i>Onoclea sensibilis</i> v. <i>interrupta</i>	.	.	.	.	.	.	.	.	.	3 ⁺	.	.
<i>Dioscorea tenuipes</i>	.	.	.	.	.	.	.	.	.	3 ⁺	.	.
<i>Sinomenium acutum</i>	.	.	.	.	.	.	.	.	.	3 ⁺	.	.
<u>Trennarten der Subassoziation:</u>														
<i>Nanocnide japonica</i>	.	.	.	.	.	.	.	.	.	.	.	V ⁺³
<i>Lycoris sanguinea</i>	.	.	.	.	.	.	.	.	.	.	1 ⁺	V ⁺
<i>Cardamine leucantha</i>	.	.	.	.	.	.	.	.	.	.	.	V ⁺²
<i>Chamaele decumbens</i>	.	.	.	.	.	.	.	.	.	.	1 ¹	IV ⁺²
<u>Trennarten der Degenerations-Phase:</u>														
<i>Quercus glauca</i>	3 ¹⁻⁴	4 ⁺³	2 ¹⁻²	.	.	1 ⁺	IV ⁺²	V ⁺¹	III ⁺⁴	.	1 ²	1 ⁺		
<i>Dryopteris erythrosora</i>	1 ⁺	4 ⁺²	2 ⁺¹	1 ⁺	.	1 ⁺	IV ⁺²	V ⁺²	III ⁺¹	.	1 ⁺	.		
<i>Cinnamomum camphora</i>	2 ⁺²	2 ¹	1 ¹	.	.	.	1 ²	III ¹⁻²	I ⁴	.	.	I ⁺		
<i>Eurya japonica</i>	.	2 ⁺	1 ⁺	1 ⁺	1 ⁺	.	II ⁺	V ⁺¹	II ⁺	.	.	.		
<i>Ilex integra</i>	1 ⁺	3 ⁺²	.	.	.	.	III ⁺¹	V ⁺²	II ⁺¹	.	.	.
<i>Ilex rotunda</i>	.	3 ⁺¹	.	.	.	.	I ⁺	V ⁺⁴	I ⁺	.	.	.
<i>Ficus nipponica</i>	1 ⁺	1 ⁺	II ⁺	.	III ⁺	.	.	.		
<u>Trennarten der Optimal-Phase:</u>														
<i>Phyllostachys nigra</i> v. <i>henonis</i>	.	.	.	.	1 ¹	.	.	.	.	4 ¹⁻³	1 ¹	V ⁺³
<i>Arundinaria simonii</i>	.	.	.	.	4 ⁺⁴	.	.	.	I ⁺	1 ³	.	IV ¹⁻²
<i>Cyclosorus acuminatus</i>	.	.	.	.	4 ⁺¹	.	.	.	I ⁺	.	1 ⁺	V ⁺¹
<i>Cryptotaenia japonica</i>	.	.	.	.	3 ⁺	.	.	.	I ⁺	1 ⁺	.	V ⁺¹
<i>Rubus hirsutus</i>	.	.	.	.	1 ⁺	.	.	.	I ¹	1 ⁺	.	III ⁺
<i>Houttuynia cordata</i>	.	.	.	.	1 ⁺	.	.	.	II ⁺¹	1 ⁺	.	III ⁺
<i>Coniogramme japonica</i>	.	.	.	.	1 ¹	.	.	.	I ¹⁻²	2 ⁺	.	II ⁺
<i>Zingiber mioga</i>	.	.	.	.	1 ⁺	.	.	.	II ⁺¹	2 ¹⁻³	.	II ⁺
<i>Glechoma hederacea</i> v. <i>grandis</i>	.	.	.	.	2 ⁺¹	.	.	.	I ⁺¹	.	.	V ⁺¹
<i>Cephalotaxus harringtonia</i>	.	.	.	.	1 ⁺	.	.	.	I ⁺¹	.	.	III ⁺
<i>Lilium cordatum</i>	.	.	.	.	2 ⁺	.	.	.	II ⁺¹	.	.	II ⁺
<u>Kennarten von Camellieta japonicae:</u>														
<i>Trachelospermum asiaticum</i>	3 ²⁻⁴	3 ⁺	2 ²⁻³	1 ⁺	2 ⁺	1 ²	V ⁺²	IV ⁺	III ⁺¹	1 ¹	1 ⁺	I ¹		
<i>Cinnamomum japonicum</i>	3 ¹⁻²	4 ⁺¹	2 ¹⁻²	1 ⁴	4 ⁺²	1 ⁴	V ⁺³	IV ⁺¹	V ⁺¹	1 ¹	.	V ⁺²		
<i>Hedera rhombea</i>	1 ²	3 ⁺	3 ⁺	1 ⁺	4 ⁺¹	.	V ⁺²	V ⁺	IV ⁺²	3 ⁺¹	1 ²	V ⁺¹		
<i>Liriope platyphylla</i>	1 ¹	3 ⁺	2 ⁺	1 ⁺	1 ⁺	.	IV ⁺¹	V ⁺²	V ⁺²	4 ⁺³	1 ¹	IV ⁺²		
<i>Ophiopogon japonicus</i>	1 ⁺	3 ⁺¹	2 ⁺	1 ⁺	2 ⁺	1 ⁺	V ⁺²	V ⁺¹	IV ⁺¹	2 ¹	.	II ⁺		
<i>Camellia japonica</i>	2 ²⁻³	2 ⁺¹	2 ¹	.	4 ⁺⁴	.	III ⁺²	V ⁺²	V ⁺⁵	3 ¹⁻³	1 ⁺	II ⁺²		
<i>Ardisia japonica</i>	1 ⁺	2 ⁺	2 ⁺	1 ⁺	1 ⁺	1 ⁺	II ⁺	.	IV ⁺¹	1 ⁺	.	II ⁺		
<i>Neolitsea sericea</i>	3 ¹⁻²	.	.	1 ⁺	4 ¹	1 ³	II ⁺	.	IV ⁺³	4 ⁺³	1 ³	V ⁺²		
<i>Ligustrum japonicum</i>	1 ¹	4 ⁺¹	.	1 ⁺	2 ⁺¹	.	IV ⁺	IV ⁺	IV ⁺³	1 ⁺	.	II ⁺¹		
<i>Aucuba japonica</i>	.	4 ⁺²	2 ⁺	.	2 ⁺²	.	V ⁺³	IV ⁺¹	V ⁺⁴	4 ¹⁻³	.	III ⁺²		
<i>Kadsura japonica</i>	.	2 ⁺¹	2 ⁺	.	4 ⁺	.	III ⁺²	.	IV ⁺¹	1 ⁺	1 ¹	V ⁺²		
<i>Ardisia crenata</i>	2 ⁺	.	.	1 ⁺	2 ⁺	.	.	III ⁺	II ⁺	.	.	III ⁺		
<i>Gardenia jasminoides</i> f. <i>grandiflora</i>	3 ²	1 ⁺	1 ⁺	.	2 ⁺		
<i>Machilus thunbergii</i>	1 ¹	.	.	.	.	.	.	V ⁺¹	.	1 ¹	.	II ⁺²
<i>Cleyera japonica</i>	.	.	.	1 ⁺	.	1 ⁺	.	III ⁺¹	IV ⁺³	.	.	.		
<i>Fatsia japonica</i>	.	.	.	.	1 ⁺	.	.	II ¹	I ⁺	.	.	.
<i>Dryopteris pacifica</i>	1 ²	1 ⁺	II ⁺		
<i>Castanopsis cuspidata</i> v. <i>sieboldii</i>	2 ⁺¹	.	.	.	.	.	.	II ⁺		
<i>Podocarpus macrophyllus</i>	.	.	.	.	.	.	II ⁺	.	II ⁺¹	.	.	.
<i>Elaeagnus glabra</i>	.	.	.	.	.	.	I ⁺	III ⁺²	.	.	.	.
<i>Piper kadzura</i>	1 ²	.	.	.	1 ²	.	.	.	.	.	.	.
<i>Ternstroemia gymnanthera</i>	1 ⁺		
<i>Daphniphyllum teijsmannii</i>	.	1 ¹	.	.	.	.	.	.	.	.	.	.
<i>Quercus salicina</i>	.	.	.	.	.	.	.	.	I ⁺	.	.	.
<u>Begleiter:</u>														
<i>Oplismenus undulatifolius</i> v. <i>japonicus</i>	1 ⁺	2 ⁺⁴	3 ⁺¹	1 ⁺	2 ¹⁻²	1 ⁺	V ⁺³	IV ⁺	IV ⁺⁴	1 ⁺	1 ¹	IV ⁺²		
<i>Elaeagnus pungens</i>	3 ⁺	1 ⁺	1 ⁺	1 ⁺	1 ⁺	1 ⁺	III ⁺¹	.	I ⁺	.	1 ¹	IV ⁺		
<i>Akebia quinata</i>	.	1 ⁺	2 ⁺	1 ⁺	2 ⁺	.	II ⁺	IV ⁺	III ⁺²	4 ⁺¹	1 ⁺	IV ⁺		
<i>Achyranthes japonica</i>	.	1 ⁺	2 ⁺	.	3 ⁺¹	1 ⁺	1 ⁺	.	IV ⁺¹	2 ⁺	1 ⁺	III ⁺		
<i>Ficus erecta</i>	1 ⁺	4 ⁺³	3 ¹⁻²	.	3 ⁺	.	V ⁺³	III ⁺	I ⁺	.	1 ⁺	V ⁺²		
<i>Cyrtomium fortunei</i>	.	1 ⁺	1 ⁺	.	1 ⁺	.	III ⁺	III ⁺	II ⁺	1 ⁺	1 ⁺	I ⁺		
<i>Commelina communis</i>	.	1 ⁺	2 ⁺	.	3 ⁺	1 ⁺	III ⁺	.	II ⁺	1 ⁺	1 ⁺	II ⁺		
<i>Polygonum filiforme</i>	.	1 ¹	1 ²	.	3 ⁺	.	III ⁺	IV ⁺¹	II ⁺¹	3 ⁺	1 ⁺	V ⁺		
<i>Mallotus japonicus</i>	.	1 ¹	1 ⁺	.	2 ⁺	.	I ⁺	I ⁺	I ⁺	1 ⁺	1 ⁺	II ⁺		
<i>Thea sinensis</i>	1 ⁺	3 ⁺¹	1 ⁺	.	2 ⁺	.	II ⁺	.	IV ⁺	3 ⁺	1 ⁺	.		
u.a.	.	.	.	.	.	.	.	.	.	.	.	.

Lfd.-Nr. 1, *Aphananthe aspera*-*Elaeocarpus sylvestris* v. *ellipticus*-Ges., Tab. 4: Kumamoto-ken (Miyawaki et al. 1976); 2, 3, 7, *Zelkova serrata*-*Aphananthe aspera*-Ges., Tab. 7: Hyogo-ken (Miyawaki et Fujiwara 1974); 4, 6, *Aphananthe aspera*-*Celtis sinensis* v. *japonica*-Ges., Tab. 7: Hyogo-ken (Yano et al. 1975); 5, 12, vom Verf.: Shikoku (n.p.); 8, *Aphananthe aspera*-*Zelkova serrata*-*Aphananthe aspera*-Ges., Tab. 2: Shiga-ken (Kobayashi et al. 1976); 10, *Zelkova serrata*-*Phyllostachys nigra* v. *henonis*-Ges., Tab. 2: Shiga-ken (Kobayashi et al. 1976); 11, vom Verf.: Hiroshima-ken (n.p.).

Tab. 2. Aphanantho-Celtidetum japonicae (in Shikoku).

a = Typische Subass. b = Nanocnidetosum japonicae

Spalte:	a				b													
Nr. d. Aufnahme:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Datum d. Aufnahme ('77):	10	10	10	10	10	10	10	10	4	4	4	4	5	5	4	4	4	
Meereshöhe (m):	20	30	50	60	60	30	80	100	60	80	80	50	30	30	-	-	-	
Exposition:	-	-	-	SE	-	-	-	-	-	-	-	-	-	-	-	-	-	
Neigung (°):	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	
Größe d. Probestfläche (m ²):	50	100	200	100	300	240	200	400	400	200	160	300	450	300	200	150	300	
Höhe d. Baumschicht-1 (m):	18	18	18	17	16	18	21	24	25	20	20	20	22	20	15	18	20	
Deckung d. Baumschicht-1 (%):	80	80	60	80	85	85	80	80	80	80	80	90	80	80	90	80	90	
Höhe d. Baumschicht-2 (m):	7	8	7	7	5	7	10	8	15	8	8	8	12	10	7	8	10	
Deckung d. Baumschicht-2 (%):	40	80	70	50	30	60	40	50	30	40	60	60	40	50	40	60	40	
Höhe d. Strauchschicht (m):	3	3	3	3	3	2	4	2	8	4	4	4	3	3	4	3	4	
Deckung d. Strauchschicht (%):	40	40	20	30	40	40	40	20	40	40	40	50	10	10	20	30	50	
Höhe d. Krautschicht (m):	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.6	0.4	0.6	1	1	0.6	0.5	0.6	
Deckung d. Krautschicht (%):	50	60	60	50	70	40	70	80	70	40	20	50	80	70	80	70	60	
Artenzahl:	36	34	53	47	53	49	46	56	46	48	51	53	46	54	56	43	56	
Kenn- und Trennarten d. Ass.: (Schicht)																		
Celtis sinensis v. japonica	B1	B2	S	4.4	4.3	3.3	4.3	5.4	5.4	4.4	4.4	3.2	3.3	3.3	4.4	4.4	4.4	
Aphananthe aspera	B1	B2	S	2.2	3.3	+	1.1	2.2	2.2	2.2	2.3	4.3	4.4	4.4	4.3	2.2	1.2	
Reineckea carnea	K	+	2.2	2.3	+	2.2	+	2.2	+	2.2	+	1.2	1.2	+	2.2	2.2	1.2	
Trennarten d. Subass.:																		
Nanocnide japonica	K	+	3.4	+	3.4	3.4	1.2	1.2	+	2.3	+	2.3	+	1.2	1.2	2.2	2.2	
Lycoris sanguinea	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cardamine leucantha	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Celastrus orbiculatus	S	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Chamaele decumbens	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Euonymus sieboldianus	B2	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Trennarten d. Var.:																		
Machilus thunbergii	B1	B2	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Neocheiropteris ensata	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Trennarten d. Aspekte:																		
Commelina communis	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Boehmeria nipononivea	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lycoris radiata	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pilea mongolica	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Kennarten von Camellieta japonicae:																		
Neolitsea sericea	B2	S	1.1	1.1	1.2	1.1	+	+	2.1	1.1	2.2	1.1	2.2	1.2	1.1	1.1	1.2	
Hedera rhombea	B1	B2	S	1.2	+	2.3	1.2	+	2.2	2.2	+	2.2	+	1.2	+	1.1	1.2	
Cinnamomum japonicum	B1	B2	S	2.1	+	2.3	2.2	+	2.2	+	2.2	+	1.2	+	+	1.1	1.2	
Kadsura japonica	S	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Liriope platyphylla	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Camellia japonica	B2	S	2.2	4.3	+	1.1	+	+	+	+	+	+	+	+	+	+	+	
Aucuba japonica	S	+	2.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ardisia crenata	S	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ligustrum japonicum	S	1.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ophiopogon japonicus	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ardisia japonica	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Trachelospermum asiaticum	B1	B2	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Quercus glauca	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Gardenia jasminoides f. grandiflora	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Eurya japonica	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Fatsia japonica	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Piper kadsura	S	K	2.3	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Begleiter:																		
Ficus erecta	B2	S	K	+	+	+	+	+	1.2	+	1.2	+	1.2	+	+	+	+	
Rosa multiflora	S	K	+	+	+	+	+	+	1.2	+	+	+	1.2	+	+	+	+	
Polygonum filiforme	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Leptogramma mollissima	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lonicera japonica	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Oplismenus undulatifolius v. japonicus	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Akebia quinata	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Elaeagnus pungens	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Achyranthes japonica	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hemerocallis fulva v. kwanso	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ligustrum obtusifolium	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Boehmeria longispica	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Morus bombycis	B2	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Clematis terniflora	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Gynostemma pentaphyllum	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stellaria neglecta	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Juglans ailanthifolia	B1	B2	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Mercurialis leiocarpa	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Mallotus japonicus	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Duchesnea indica	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pollia japonica	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Aster ageratoides v. ovatus	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Trachycarpus fortunei	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Polystichum polyblepharum	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Hosta nakaiana	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ranunculus quelpaertensis	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Festuca parvigluma	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Sanicula chinensis	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Parthenocissus tricuspidata	B1	B2	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Nandina domestica	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cyrtomium fortunei	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Eriobotrya japonica	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Sambucus sieboldiana	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Arisaema ringens	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Athyrium niponicum	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Sedum bulbiferum	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Cayratia japonica	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Stellaria aquatica	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Phalaris arundinacea	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Dioscorea japonica	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Lindera glauca	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Trichosanthes cucumeroides	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Shibataea kumasaca	S	1.2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Rhus succedanea	B2	S	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Pteris cretica	K	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
Ardisia montana	K	+	+															

Table 1. Floristic composition of swamp forests in the Iwana-zawa.

A: *Ulmus davidiana* community.B: *Alnus japonica*-*Carex fulta* comm.a: *Filipendula kamtschatica* type.b: *Phragmites communis* type.C: *Alnus japonica*-*Miscanthus sinensis* comm.D: *Alnus japonica*-*Sasa senanensis* comm.

Community Type	A	B		C	D	
		a	b			
No. of Records	14	7	4	5	5	
Species	No. of Species	32-49	27-56	21-45	37-46	13-23
<i>Sanicula chinensis</i>	V ⁺	
<i>Polygonum filiforme</i>	IV ⁺	.	.	I ⁺	.	
<i>Galium japonicum</i>	IV ⁺	II ⁺	1 ⁺	.	.	
<i>Milium effusum</i>	IV ⁺	II ⁺	.	.	.	
<i>Heracleum dulce</i>	III ⁺⁻¹	I ⁺	.	.	.	
<i>Morus bombycis</i>	III ⁺⁻²	.	.	.	I ²	
<i>Angelica ursina</i>	III ⁺⁻¹	.	.	I ⁺	.	
<i>Oreorchis patens</i>	III ⁺	
<i>Carex stenostachys</i> var. <i>cuneata</i>	III ⁺⁻²	.	.	.	.
<i>Laportea bulbifera</i>	III ⁺⁻²	I ⁺	.	.	.	
<i>Chloranthus japonicus</i>	II ⁺⁻¹	.	.	.	.
<i>Cardamine leucantha</i>	II ⁺	
<i>Adenocaulon himalaicum</i>	II ⁺	
<i>Boehmeria tricuspis</i>	II ⁺	
<i>Ulmus davidiana</i>	V ²⁻⁵	II ⁺⁻¹	.	V ⁺⁻¹	I ¹	
<i>Liparis kunokiri</i>	IV ⁺	I ⁺	.	V ⁺⁻¹	.	
<i>Oplismenus undulatifolius</i> var. <i>japonicus</i>	III ⁺⁻¹	.	.	IV ⁺⁻³	.	
<i>Cacalia hastata</i> var. <i>orientalis</i>	V ⁺⁻²	.	.	II ⁺	.	
<i>Carex doniana</i>	III ⁺⁻¹	.	.	II ⁺	.	
<i>Agrimonia pilosa</i>	III ⁺	I ⁺	.	II ⁺	.	
<i>Petasites japonicus</i> var. <i>giganteus</i>	II ⁺⁻¹	.	.	II ⁺	.	
<i>Ligularia stenocephala</i>	V ¹⁻⁴	IV ⁺⁻³	2 ⁺⁻¹	.	.	
<i>Clinopodium gracile</i> var. <i>sachalinense</i>	IV ⁺⁻¹	V ⁺	1 ⁺	.	.	
<i>Impatiens textori</i>	III ⁺⁻¹	V ⁺⁻¹	1 ¹	.	.	
<i>Cimicifuga simplex</i>	IV ⁺	III ⁺⁻²	.	.	.	
<i>Geum japonicum</i>	IV ⁺⁻²	III ⁺	.	.	.	
<i>Aconitum japonicum</i>	III ⁺⁻¹	II ⁺	.	.	.	
<i>Carex fulta</i>	II ⁺	V ⁺⁻³	4 ⁺⁻²	II ⁺⁻¹	I ⁺	
<i>Carex rhynchophylla</i>	I ⁺	IV ⁺⁻²	4 ⁺⁻¹	II ¹	.	
<i>Ligularia fischeri</i>	II ⁺⁻²	V ⁺⁻¹	3 ¹⁻²	.	.	
<i>Dryopteris tokyoensis</i>	II ⁺	IV ⁺	2 ¹⁻²	II ⁺	.	
<i>Osmundastrum cinnamomeum</i> var. <i>fokiense</i>	.	III ⁺⁻¹	2 ¹⁻³	.	I ⁺	
<i>Onoclea sensibilis</i> var. <i>interrupta</i>	I ⁺	III ⁺	2 ⁺	I ⁺	.	
<i>Filipendula kamtschatica</i>	I ⁺	V ⁺⁻¹	.	.	.	
<i>Mitella pauciflora</i>	I ⁺	III ⁺⁻⁴	.	.	II ⁺⁻¹	
<i>Phragmites communis</i>	.	I ⁺	4 ⁺⁻⁴	I ⁺	.	
<i>Lycopus maackianus</i>	.	I ¹	4 ⁺⁻²	V ⁺	.	
<i>Miscanthus sinensis</i>	.	.	1 ⁺	V ⁺⁻⁴	.	
<i>Pteridium aquilinum</i> var. <i>latiusculum</i>	I ⁺	.	.	V ⁺⁻²	.	
<i>Viburnum dilatatum</i>	I ⁺	.	.	V ⁺	.	
<i>Lysimachia clethroides</i>	I ⁺	.	.	IV ⁺⁻¹	.	
<i>Rubus parvifolius</i>	I ⁺	.	.	III ⁺⁻¹	.	
<i>Sasa senanensis</i>	I ²	.	.	.	V ⁵	
<i>Cephalotaxus harringtonia</i> var. <i>nana</i>	.	I ⁺	.	.	IV ⁺	
<i>Alnus japonica</i>	.	V ⁴⁻⁵	4 ¹⁻⁵	V ⁴⁻⁵	V ⁴⁻⁵	
<i>Ilex crenata</i> var. <i>paludosa</i>	II ⁺⁻¹	V ⁺⁻³	3 ⁺⁻¹	IV ¹	V ⁺⁻²	
<i>Hydrangea paniculata</i>	I ⁺	V ⁺⁻²	3 ⁺⁻¹	III ¹⁻³	V ²	
<i>Athyrium vidalii</i>	II ⁺	V ⁺	4 ⁺⁻¹	I ⁺	IV ⁺⁻¹	
<i>Rhus ambigua</i>	I ⁺	V ⁺⁻¹	2 ⁺⁻¹	II ¹	III ⁺	
<i>Fraxinus mandshurica</i> var. <i>japonica</i>	I ⁺⁻¹	III ¹	2 ⁺⁻¹	IV ⁺⁻²	III ¹⁻²	
<i>Ligustrum tschonoskii</i>	V ⁺⁻²	V ⁺⁻²	4 ¹	V ⁺⁻¹	III ¹⁻²	
<i>Cirsium nipponicum</i>	IV ⁺⁻¹	V ⁺⁻²	4 ⁺⁻²	II ⁺	I ⁺	
<i>Viola verecunda</i>	V ⁺⁻²	V ⁺⁻²	3 ⁺	III ⁺⁻¹	.	
<i>Polygonum thunbergii</i>	IV ⁺⁻¹	V ⁺⁻³	4 ⁺⁻⁴	III ⁺	I ⁺	
<i>Viburnum opulus</i> var. <i>calvescens</i>	III ⁺⁻²	V ⁺⁻³	1 ⁺	IV ⁺⁻¹	I ¹	
<i>Acer palmatum</i> var. <i>matsumurae</i>	III ⁺⁻¹	III ⁺⁻³	1 ⁺	IV ⁺⁻¹	III ¹⁻²	
<i>Symplocos chinensis</i> var. <i>leucocarpa</i> f. <i>pilosa</i>	III ⁺⁻⁴	IV ⁺	1 ⁺	II ¹	II ⁺⁻¹	
<i>Sceptridium ternatum</i>	IV ⁺⁻¹	I ⁺	.	III ¹	I ⁺	
<i>Sambucus sieboldiana</i>	IV ⁺⁻¹	III ⁺	.	III ⁺⁻²	I ⁺	
<i>Carex foliosissima</i>	III ⁺⁻³	IV ⁺⁻¹	.	II ¹	I ¹	
<i>Viburnum plicatum</i> var. <i>tomentosum</i>	II ⁺⁻¹	V ⁺⁻²	1 ⁺	III ⁺	.	
<i>Euonymus alatus</i> f. <i>ciliatodentatus</i>	III ⁺	III ⁺⁻³	.	I ⁺	II ⁺⁻¹	
<i>Rosa multiflora</i>	II ⁺	II ⁺	1 ¹	V ⁺⁻¹	I ⁺	
<i>Polygonum cuspidatum</i>	III ⁺	.	.	III ⁺⁻¹	III ⁺	
<i>Lastrea thelypteris</i>	II ⁺	II ⁺	2 ⁺	IV ⁺⁻¹	I ⁺	
<i>Vitis coignetiae</i>	III ⁺⁻¹	.	.	I ⁺	IV ⁺⁻¹	
<i>Humulus lupulus</i> var. <i>cordifolius</i>	III ⁺	I ⁺	1 ⁺	III ⁺	.	
<i>Prunus grayana</i>	I ⁺	III ⁺⁻¹	1 ¹	III ⁺⁻²	III ⁺⁻¹	
<i>Dioscorea nipponica</i>	III ⁺	III ⁺	.	I ⁺	.	
<i>Codonopsis lanceolata</i>	II ⁺	I ⁺	.	II ⁺	II ⁺	
<i>Dioscorea tokoro</i>	III ⁺	.	.	II ⁺	.	
<i>Euonymus fortunei</i> var. <i>radicans</i>	III ⁺⁻¹	I ⁺	.	I ⁺	.	
<i>Polygonatum macranthum</i>	II ⁺	II ⁺	.	II ⁺	.	
<i>Plectranthus trichocarpus</i>	II ⁺	II ⁺	.	III ⁺	.	
<i>Smilax nipponica</i>	II ⁺	I ⁺	.	III ⁺	.	
<i>Elatostema umbellatum</i> var. <i>majus</i>	I ⁺	II ⁺⁻²	1 ⁺	.	II ⁺	
<i>Hydrangea petiolaris</i>	.	I ⁺	2 ⁺	.	IV ⁺	
<i>Equisetum arvense</i>	I ⁺	I ⁺	2 ⁺	.	II ⁺	
<i>Pourthiaca villosa</i> var. <i>zollingeri</i>	.	III ⁺⁻²	1 ⁺	I ⁺	I ⁺	
<i>Celastrus orbiculatus</i> var. <i>papillosus</i>	II ⁺⁻¹	.	.	III ⁺⁻¹	.	
<i>Senecio cannabifolius</i>	II ¹	I ¹	2 ⁺	I ⁺	.	
<i>Swertia bimaculata</i>	II ⁺	II ⁺	2 ⁺	.	.	
<i>Kalimeris pinnatifida</i>	II ⁺	I ⁺	2 ⁺	.	.	
<i>Plectranthus kameba</i>	II ⁺	II ⁺	.	.	I ⁺	
<i>Cornus controversa</i>	I ⁺⁻¹	I ¹	.	III ⁺	.	
<i>Trisetum bifidum</i>	II ⁺	II ⁺	.	.	.	
<i>Leptogramma mollissima</i>	I ⁺	I ⁺	.	.	III ⁺⁻¹	
<i>Platanthera</i> sp.	I ¹	II ⁺	1 ⁺	.	.	
<i>Aster ageratoides</i> var. <i>ovatus</i>	II ⁺	.	.	I ⁺	.	
<i>Tripterospermum japonicum</i>	II ⁺	.	.	III ⁺	.	
<i>Galium trachyspermum</i>	II ⁺	.	2 ⁺	.	.	
<i>Hydrangea involucrata</i> var. <i>megacarpa</i>	II ⁺	I ⁺	.	I ⁺	.	
<i>Astilbe thunbergii</i> var. <i>congesta</i>	II ¹	.	1 ⁺	I ¹	.	
<i>Acer mono</i>	II ⁺⁻⁴	I ⁺	.	.	.	
<i>Magnolia obovata</i>	I ⁺	.	.	II ⁺	II ⁺	
<i>Acanthopanax sieboldianus</i>	II ⁺	I ⁺	.	.	.	
<i>Quercus mongolica</i> var. <i>grosseserrata</i>	II ⁺⁻¹	.	.	II ⁺⁻¹	.	
<i>Acer japonicum</i>	.	I ¹	.	II ⁺	II ¹	
<i>Arisaema angustatum</i> var. <i>peninsulae</i>	I ⁺	II ⁺	.	I ⁺	.	
<i>Potentilla freyniana</i>	I ⁺	.	1 ⁺	II ⁺⁻¹	.	
<i>Impatiens noli-tangere</i>	II ⁺	I ⁺	.	.	.	
<i>Magnolia kobus</i>	II ⁺⁻¹	I ²	.	.	.	
<i>Chrysosplenium ramosum</i>	II ⁺⁻¹	.	1 ⁺	.	.	
<i>Stellaria media</i>	II ⁺	.	.	I ⁺	.	
<i>Juglans ailanthifolia</i>	I ¹⁻³	II ¹	.	.	.	
<i>Lysimachia japonica</i>	I ⁺	I ⁺	.	III ⁺	.	
<i>Brachypodium sylvaticum</i>	.	II ⁺⁻¹	.	II ⁺	.	
<i>Rubus palmatus</i> var. <i>coptophyllus</i>	.	II ⁺	.	II ⁺	.	
<i>Disporum sessile</i>	II ⁺	I ⁺	.	.	.	
<i>Aesculus turbinata</i>	I ⁺	.	.	.	I ¹	

Table. 1. Diagnostic table of the vegetation units in and around the Kui block field

		B. Vegetation around the goro										
		I. Ligustrum obtusifolium - Wisteria brachybotrys comm.					III. Pinus densiflora - Rhododendron reticulatum comm.					
		II. Prunus grayana - Hydrangea petiolaris comm.					1. Blechnum nipponicum group					
		1. typical group					1) typical subgroup					
		1) typical subgroup					2) Ardisia japonica subgroup					
		2) Magnolia obovata subgroup					3) Mithcanthus sinensis subgroup					
		2. Ilex pedunculosa group					2. Cladonia rangiferina group					
		1) typical group										
		2) Magnolia obovata subgroup										
		I II III										
		1 2 1 2 1 2 3										
		1) 2) 1) 2) 1) 2) 3)										
Life form*	Number of quadrats	6	5	7	10	17	4	11	17	2		
1 DNL	Lygustrum obtusifolium	V ₁₋₂	V ₁₋₃	V ₁₋₂	V ₁₋₃	V ₊₃	.	.	.	.	.	.
DML	Rhus javanica	V ₊₂	V ₁₋₃	V ₊₃	V ₊₂	V ₊₂	.	.	.	.	.	.
DL	Smilax sieboldii	V ₊₁	V ₊₁	V ₊₁	V ₊	V ₊₁	.	.	.	.	.	.
DL	Parthenocissus tricuspidata	III ₁	V ₊₁	V ₊₁	II ₁₋₂	III ₊₂	.	.	.	.	.	.
DNL	Callicarpa japonica	V ₊₁	I ₁	V ₊₂	II ₊₁	III ₊₂	.	I ₊
DNL	Deutzia crenata	III ₊₁	III ₊₁	III ₊₂	II ₊₂	V ₊₁	.	.	.	.	.	.
DL	Cocculus trilobus	III ₁₋₂	V ₊₁	V ₊	III ₊	III ₊₁	.	.	I ₊	.	.	.
EL	Lonicera japonica	II ₊	V ₊₁	V ₊	II ₊₁	III ₊₁	.	I ₊
M	Thuidium kanedae	III ₁₋₂	III ₊₁	V ₊₂	V ₊₁	V ₊₃	.	.	.	.	1 ₊₁	.
M	Plagiothecium nemorale	III ₊₁	II ₁	V ₊₄	V ₊₃	III ₊₂	.	I ₊
M	Isothecium subdiversiforme	II ₊₁	I ₊	III ₊₁	II ₊₁	III ₊₂	.	.	.	.	.	.
DL	Schizophragma hydrangeoides	V ₊₃	III ₊₂	II ₁₋₅	II ₁	III ₊₁	.	.	I ₊	.	.	.
HR	Ophyopogon japonicus	I ₊	I ₊	III ₊₁	III ₊	III ₊₁	.	.	.	.	.	.
2 DML	Prunus grayana	.	III ₊₁	V ₊₁	V ₊₂	V ₊₃	.	III ₊₂	I ₊	.	.	.
GR	Calamagrostis tashiroi	.	V ₊₁	III ₊	III ₊	III ₊	.	I ₊	I ₊	.	.	.
DNL	Euonymus oxyphyllus	.	II ₊₁	III ₊₁	II ₊₁	V ₊₂	1 ₊	.	I ₊	.	.	.
DL	Wisteria floribunda	.	I ₊	III ₊₁	II ₁	III ₊₁	.	I ₊	I ₊	.	.	.
DNL	Abelia spothulata	.	I ₁	V ₊₂	II ₊₂	III ₊₂	1 ₊	I ₊₁	I ₊	.	.	.
DNL	Zanthoxylum schinifolium	.	V ₊₁	I ₊	II ₊₁	II ₊₁	.	.	I ₊	.	.	.
E	Pleopeltis thunbergiana	.	II ₊	III ₊	II ₊	I ₊
DL	Hydrangea petiolaris	.	V ₃₋₅	III ₁₋₄	I ₄₋₅	II ₁₋₄	.	.	.	.	.	.
EL	Trachelospermum asiaticum	.	III ₁₋₂	III ₁₋₂	I ₁	I ₁₋₂	.	.	.	.	.	.
3 EML	Ilex pedunculosa	.	.	.	V ₊₂	V ₊₂	.	4 ₂₋₄	V ₁₋₅	V ₊₄	2 ₊₂	.
EML	Eurya japonica	.	.	.	V ₊₂	V ₊₃	.	4 ₄	V ₂₋₅	V ₊₅	2 ₊₂	.
HSC	Tripterispermum japonicum	.	.	.	II ₊	III ₊	.	3 ₊₁	V ₊₁	V ₊₁	1 ₊	.
SNL	Rhododendron kaempferi	.	.	.	II ₊	III ₊₁	.	4 ₊₃	V ₊₃	V ₊₅	2 ₁₋₂	.
DNL	R. reticulatum	.	.	.	II ₊₁	III ₊₃	.	4 ₂₋₃	V ₁₋₄	V ₊₄	2 ₂	.
DML	Castanea crenata	.	.	.	II ₊₁	V ₊₂	.	.	V ₊₁	V ₊₂	1 ₊	.
4 DML	Magnolia obovata	.	.	III ₁₋₄	.	V ₊₄	.	.	.	I ₊	.	.
GR	Disporum smilacinum	.	.	III ₊₁	.	V ₊₂	.	.	I ₊	.	.	.
M	Entodon sullivantii var. versicolor	III ₊₂	.	III ₊₁	.	III ₊₂	.	.	.	I ₊	.	.
DML	Evodiopanax innovans	.	.	V ₊₂	.	III ₊	2 ₊	II ₊₁	II ₊	.	.	.
5 EMA	Pinus densiflora	.	I ₊	I ₊	.	I ₊	.	4 ₄₋₅	V ₄₋₅	V ₄₋₅	2 ₊₂	.
EMA	Juniperus rigida	.	.	.	.	.	.	3 ₊₂	I ₊₁	V ₊₂	2 ₂	.
DML	Lyonia ovalifolia var. elliptica	.	.	.	.	.	.	1 ₊	II ₁₋₂	II ₊₃	2 ₁	.
6 HR	Blechnum nipponicum	.	.	I ₊	I ₊	II ₊	.	4 ₄	V ₊₂	V ₊₁	.	.
HR	Cymbidium goeringii	.	.	.	.	II ₊	.	3 ₊₁	V ₊₁	III ₊	.	.
M	Brotherella henonii	.	.	I ₊	.	I ₊	.	3 ₊₁	III ₊₁	III ₊₂	.	.
GR	Pteridium aquilinum var. latiusculum	.	.	.	.	.	.	1 ₊	II ₊₁	III ₊₁	.	.
7 ENL	Ilex crenata	I ₊	.	III ₊₃	V ₊₂	V ₊₂	.	4 ₁₋₂	V ₊₃	V ₊₃	.	.
DML	Acanthopanax sciadophylloides	.	.	V ₊₂	III ₊₂	V ₊₃	.	4 ₊₃	V ₊₃	V ₊₄	.	.
DML	Pourthiaea villosa var. laevis	I ₊	.	II ₊	II ₊₁	V ₊₁	.	3 ₁	V ₊₂	V ₊₁	.	.
DNL	Viburnum erosum	.	.	III ₊₁	III ₊	V ₊₁	.	3 ₊	V ₊₁	III ₊₁	.	.
DML	Clethra barbinervis	.	.	III ₊₁	III ₁	III ₊₂	.	3 ₊₁	II ₁₋₃	II ₁₋₃	.	.
DNL	Pertya scandens	.	.	I ₊	I ₊₃	III ₊₃	.	3 ₊	III ₊₁	II ₊₁	.	.
8 M	Cladonia rangiferina	.	.	.	.	.	.	.	.	.	2 ₁₋₂	.
M	Cladia aggregata	.	.	.	.	.	.	.	.	.	2 ₊₁	.
DML	Amelanchier asiatica	.	.	.	.	.	.	.	.	.	1 ₊	.
9 ENL	Ardisia japonica	.	.	II ₊	.	I ₁	.	.	V ₊₂	.	.	.
DML	Styrax japonica	.	.	II ₊₂	.	.	.	.	III ₊₁	.	.	.
10 M	Leucobryum neilgherrense	I ₁	I ₊	II ₊	V ₊	III ₊₂	.	.	.	V ₊	.	.
HC	Miscanthus sinensis	I ₊	III ₊	I ₊	II ₊	III ₊₂	.	.	.	III ₊₁	2 ₁	.
11 DML	Lindera glauca	.	II ₊₁	III ₊₁	V ₁	V ₊₂	1 ₊	II ₊	III ₊	.	.	.
DL	Wisteria brachybotrys	.	V ₊₄	V ₊₂	V ₊₃	V ₊₃	.	II ₊₁	I ₊	.	.	.
DNL	Rosa multiflora	.	V ₊₂	V ₊₂	V ₊₁	V ₊₂	.	II ₊	I ₊₁	.	.	.
DL	Akebia trifoliata	.	V ₊₁	III ₊	V ₊₂	V ₊₂	1 ₊	I ₊	I ₊	.	.	.
DL	Vitis saccharifera	.	II ₁	V ₊₂	III ₊	V ₊₁	.	I ₊	I ₊	.	.	.
EMA	Cephalotaxus harringtonia	.	V ₊₁	II ₊₂	V ₊₂	II ₊₁	1 ₊	I ₊	I ₊	.	.	.
M	Dicranum nipponense	.	V ₊	V ₊₂	V ₊₂	V ₊	.	I ₊	III ₊₁	2 ₊	.	.
DML	Lindera strychnifolia	.	V ₊₃	V ₊₃	V ₊₃	V ₊₃	4 ₊	V ₊	V ₊	.	.	.
12 DNL	Vaccinium oldhamii	.	II ₊₁	I ₊	II ₊	II ₊₁	.	4 ₊₂	V ₊₂	V ₊₃	2 ₊₂	.
DNL	V. smallii var. glabrum	.	.	II ₊	I ₊	I ₊₁	1 ₊	V ₊₁	III ₊₂	2 ₁	.	.
13 DML	Quercus serrata	III ₁₋₃	V ₁₋₄	V ₊₂	V ₁₋₄	V ₂₋₄	3 ₊₁	V ₊₂	V ₊₂	2 ₁	.	.
DL	Smilax china	V ₊	V ₊₁	V ₊	V ₊₁	V ₊₁	4 ₊₁	V ₊₁	V ₊₃	2 ₊	.	.
DL	Paederia scandens var. mairei	V ₊₂	V ₊₂	V ₊₁	V ₊	V ₊₁	2 ₊	V ₊₁	III ₊₁	1 ₊	.	.
DML	Rhus sylvestris	V ₊₁	V ₊₁	V ₊₁	II ₊₁	V ₊₁	4 ₊	V ₊₁	V ₊₁	1 ₊	.	.
M	Hypnum plumaeforme	III ₊	V ₁₋₂	V ₊₂	V ₊₃	V ₊₃	2 ₁₋₂	III ₁	V ₊₂	2 ₁	.	.
DML	Prunus jamasakura	II ₊₁	III ₁₋₂	I ₂	III ₁	III ₊₃	2 ₊₂	II ₊₂	II ₊	.	.	.
DL	Ampelopsis brevipedunculata	I ₊	II ₊₄	II ₊₁	III ₊	II ₊₁	2 ₊	II ₊	I ₊	.	.	.
SNG	Arundinaria pygmaea var. glabra	.	I ₁	.	I ₊₁	I ₁₋₃	1 ₊	I ₊	II ₊₃	1 ₁	.	.
DML	Sorbus japonica	I ₊	.	I ₂	II ₊₁	III ₊₁	2 ₊₁	III ₊₁	II ₊₁	.	.	.
DNL	Ilex serrata	.	I ₊	I ₊	I ₊	II ₊₁	.	II ₊	II ₊₁	.	.	.
M	Dicranum japonicum	.	.	I ₊	I ₊	I ₊	1 ₁	II ₊₁	II ₊₁	.	.	.
DNL	Viburnum wrightii	.	.	I ₊	I ₊	I ₊	1 ₊	I ₊	I ₊	.	.	.
HC	Carex nervata	.	.	I ₊	I ₊	I ₊	.	II ₊	II ₊	.	.	.
DNL	Lonicera gracilipes	I ₊	I ₊	I ₊	I ₊₁	II ₊	.	I ₊
DNL	Rubus palmatus	.	.	I ₊	I ₊	I ₊	.	I ₊	I ₊	.	.	.
DML	Aralia elata	II ₊	I ₊	II ₊	I ₊	I ₊
HR	Asplenium incisum	I ₊	II ₊	III ₊	II ₊	I ₊
DML	Rhamnus crenata	.	II ₁	II ₊₁	I ₁	I ₊	.	.	I ₊	.	.	.
EML	Osmanthus heterophyllus	.	I ₂	.	I ₊	I ₊	.	I ₊	I ₊	.	.	.
M	Thamnobryum sandei	.	.	I ₁	I ₊₁	I ₊₁	.	I ₊₁	I ₊₃	.	.	.
DML	Ilex macropoda	I ₊	.	I ₂	I ₁	.	.	I ₊	I ₁	.	.	.
DML	Diospyros kaki var. sylvestris	.	I ₂	II ₁₋₃	I ₂	I ₂₋₃	.	.	.	.	.	.
GB	Discorea tokoro	.	II ₊	I ₊	.	.	.	I ₊	I ₊	.	.	.
DML	Populus sieboldii	II ₊₃	.	.	I ₁₋₂	I ₊₃	.	.	I ₁	.	.	.
DL	Actinidia arguta	.	II ₊₁	.	II ₁	II ₊₁	.	.	.	.	.	.
DNL	Lespedeza bicolor forma acutifolia	.	.	.	.	.	.	I ₊	II ₊	1 ₊	.	.
DML	Celtis sinensis var. japonica	.	I ₊	III ₊₁	II ₁₋₂	.	.	.	.	.	.	.
DML	Acer crataegifolium	.	.	III ₊₂	.	.	.	II ₊₁	I ₊	.	.	.
DNL	Rhododendron japonicum	.	.	.	.	I ₊	.	I ₊	I ₊	.	.	.
HR	Dryopteris erythrosora	.	.	II ₊	I ₊	I ₊
GR	Polygonatum lasianthum	.	.	II ₊₁	I ₊	I ₊
DML	Celtis jessoensis	.	.	I ₁	I ₊	I ₊
DL	Celastrus orbiculatus	I ₊	.	I ₁	.	I ₁	.	.	.	.	.	.
HSC	Pertya robusta	.	.	I ₊	.	II ₊₁	.	.	.	.	.	.
DML	Zelkova serrata	.	.	II ₂ </								

17. Zu M. Minamikawa vgl. im Text 「Vegetation und Landschaft Japans」 1979 (p. 281-288)

Table 3. Table showing the floristic composition of Emerged plant community

Phragmitetea vegetation
 A : Phragmites communis Association
 B : P. japonica Association
 C : Miscanthus sacchariflorus Association
 Rumex japonicus Subassociation
 D : Zizania latifolia community
 E : Phalaris arundinacea - Oenanthe javanica community
 F : Scirpus triqueter community

Community type	(A)			(B)			(C)										(D)					(E)			(F)						
	13	20	69	60	130	77	70	130	14	98	99	112	113	104	106	87	88	80	11	121	122	7	5	114	115	132	59	105	106		
Record number	N70E	N60W	N50E	E	W	N50E	S70E	W	N60E	N50E	N45E	S40E	S50E	S60E	S65E	N40W	N45W	S30E	S80W	S50E	S50E	S60W	S45W	W	W	N70S	N60W	S50W	S45W		
Slope aspect	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Slope degree (°)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Size of quadrat (m x m)	3x3	3x3	2x5	5x5	3x5	2x5	2x4	2x5	3x3	3x3	3x3	3x5	3x3	5x5	5x5	4x3	4x3	3x3	3x3	3x3	2x3	3x3	2x5	2x2	2x2	15x2	1x1	15x1	15x15		
Height of Herb-1 (cm)	240	230	250	250	220	185	200	190	230	260	250	210	230	210	210	250	250	230	210	200	190	220	210	110	130	100	90	100	110		
Total coverage of Herb-1 (%)	90	95	90	90	80	90	90	85	90	85	85	90	90	75	80	90	85	70	90	85	75	90	70	70	85	70	65	70	55		
Height of Herb-2 (cm)	85	80	105	110	100	95	110	95	100	120	120	95	110	90	90	110	110	100	100	95	90	100	110	50	60	45	35	40	45		
Total coverage of Herb-2 (%)	45	60	50	40	50	40	55	45	40	45	40	60	65	40	50	45	50	45	35	30	60	30	20	70	75	50	45	55	50		
Total of species	13	18	15	16	15	13	18	16	8	16	20	16	15	14	14	15	17	15	6	9	9	7	5	7	14	10	12	17	15		
<u>Character spp. and differential spp. of Phragmites communis Association</u>	layer																														
Phragmites communis	H1	5.5	5.5	5.5	5.5	4.5	.	.	.	.	+	+	.	.	.	.	.	+	1.1	.	+	1.1	.	.	.	.	.	.	.	2.2
<u>Character spp. and differential spp. of Phragmites japonica Association</u>																															
Phragmites japonica	H1	.	.	.	.	.	5.5	5.5	4.5	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Equisetum arvense	H2	.	+	.	+	.	.	.	.	.	+	1.1	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Commelina communis	H2	.	.	.	.	.	+	+	+	1.1	+	+	+	.	.	.	.	+	+	+	+	+	+	.	.	.	.	.	.
<u>Character spp. and differential spp. of Miscanthus sacchariflorus Association</u>																															
Miscanthus sacchariflorus	H1	.	.	.	.	.	.	.	5.5	5.5	5.5	5.5	5.5	4.4	4.5	5.5	5.5	4.4	.	.	.	.	.	.	.	+	+	.	.	.
<u>Differential spp. of Rumex japonicus Subassociation</u>																															
Rumex japonicus	H2	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Aneilema keisak	H2	+	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.1	1.1	1.2
<u>Differential spp. of Zizania latifolia community</u>																															
Zizania latifolia	H2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5.5	5.5	4.5	5.5	4.4	.	.	.	.	.	.
<u>Differential spp. of Phalaris arundinacea-Oenanthe javanica community</u>																															
Phalaris arundinacea	H1	.	+	.	+	1.1	+	+	+	.	+	+	+	1.1	+	1.1	.	.	+	.	+	.	.	.	4.4	5.5	4.4	+	1.1	+	
Oenanthe javanica	H2	+	+	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+	+	+	+	2.2	2.2	1.2	1.1	1.1	1.1
<u>Differential spp. of Scirpus triqueter community</u>																															
Scirpus triqueter	H1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4.4	4.4	3.3
Carex thunbergii	H2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2.2	2.3	2.2
<u>Companions</u>																															
Cayratia japonica	H1	.	.	.	.	.	.	.	.	.	.	.	.	1.1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Humulus japonicus	H2	.	.	.	.	+	+	1.1	+	.	.	.	.	.	1.1	+	1.1	.	.	.	.	2.2	+	.	.	.	.	.	.	.
Rosa multiflora	H1	.	+	+	+	.	.	.	.	1.1	+	.	1.1	+	.	+	+	1.1	.	.	.	.	.	.	.	.	.	.	.	.
Paederia scandens var. mairei	H1	+	+	+	1.2	+	+	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Glycine soja	H1	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	1.1	.	+	.	.	.	.	.	.	.	.	.
Scirpus mitsukurianus	H1	1.2	2.2	+	1.1	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Juncus effusus var. decipiens	H2	1.1	+	2.2	+	1.1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Arthraxon hispidus	H2	+	1.2	+	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lycopus ramosissimus var. japonicus	H2	+	.	+	+	.	.	.	.	.	1.1	+	1.1	.	.	.	+	1.1	.	.	.	.	.	.	.	.	.	.	.	.
Carex maackii	H2	.	+	.	+	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2.2	2.2	2.2	.	.
C. dimorpholepis	H2	+	+	1.1	+	1.1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Polygonum hydropiper	H2	+	1.1	+	+	+	+	+	1.1	+	1.1	1.1	+	+
Polygonum thunbergii	H2	.	.	.	+	.	+	+	+	+
Isachne globosa	H2	+	+	1.1
Leersia sayanuka	H2	.	+	.	+
Cyperus brevifolius var. leirolepis	H2	+	.	+	+
Cyperus microiria	H2	+	+	.	+
C. iria	H2	.	+	+	+
Microstegium vimineum var. polystachyum	H2	1.1
Artemisia princeps	H2	1.1	1.1	+
Erigeron canadensis	H1	1.1	1.1	1.1
E. sumatrensis	H1	+	+	1.1
Achyranthes japonica	H2	+	+	+
Agropyron tsukushiense var. transiens	H2	+	+	+
Miscanthus sinensis	H1
Oenothera biennis	H2	+	+	+
Bidens pilosa	H2
B. frondosa	H2
Polygonum lapathifolium	H2
Viola verecunda	H2
Salvia plebeia	H2
Stachys japonica var. intermedia	H2
Acalypha australis	H2
Pilea mongolica	H1
Polygonum maackianum	H2
Lysimachia fortunei	H2
Torilis japonica	H2
Mosla punctulata	H2

Species occurring in one plot (87) Kummerovia striata, Potentilla kleiniana, Calystegia japonica. (88) Hydrocotyle maritima, Glechoma hederacea var. grand

19. Zu M. Minamikawa vgl. im Text 「Vegetation und Landschaft Japans」 1979(p.281-288)

Table 5. Table showing the floristic composition of Climbing - Stalk plant community

A : Humulus japonicus community
B : Pueraria lobata community
C : Cayratia japonica community

Community type	(A)					(B)					(C)		
	6	55	53	33	91	31	52	10	63	61	21	19	35
Record number													
Slope aspect	N45W	N30W	N50W	N70W	N35E	N70W	N45W	S60W	N50W	N40W	N30E	N70E	W
Slope degree (°)	15	18	10	15	5	10	5	12	20	20	10	18	15
Size of quadrat (m x m)	3x3	2x5	3x5	3x3	2x5	2x5	3x3	2x5	3x3	2x5	2x5	3x3	3x3
Height of Herb-1 (cm)	65	80	70	75	65	120	100	90	110	85	150	145	155
Total coverage of Herb-1 (%)	65	75	85	80	75	90	80	70	70	80	80	85	65
Height of Herb-2 (cm)	55	60	50	60	40	80	75	70	85	70	30	40	30
Total coverage of Herb-2 (%)	60	65	50	65	50	55	40	65	60	50	45	60	50
Total of species	13	14	17	18	12	12	17	12	26	24	17	26	23
<u>Differential spp. of Humulus japonicus community</u>													
	layer												
Humulus japonicus	H1	2.3	4.5	5.5	5.5	4.4	.	.	.	1.1	.	.	.
Lactuca indica var. laciniata	H2	1.1	+	+	+	+	.	+	.	+	.	.	.
<u>Differential spp. of Pueraria lobata community</u>													
Pueraria lobata	H1	.	.	.	.	.	5.5	4.4	3.4	3.3	4.4	.	.
<u>Differential spp. of Cayratia japonica community</u>													
Cayratia japonica	H1	.	.	.	.	.	.	.	+	.	3.3	3.4	2.2
<u>Companions</u>													
Phragmites communis	H1	+	+	.	.	.	.	.	.	.	+	.	+
Miscanthus sacchariflorus	H1	+	1.1	.	.	.	.	.	.	.	1.1	.	.
Rosa multiflora	H1	.	.	1.2	2.2	1.1	+	1.1	1.2	2.2	+	+	+
Artemisia princeps	H2	.	.	+	+	+	+	1.1	+	1.1	+	+	+
Agropyron tsukushiense var. transiens	H2	.	+	+	+	+	1.1	+	+	+	1.2	.	+
Commelina communis	H2	.	.	.	.	.	.	.	1.1	+	.	+	+
Achyranthes japonica	H2	.	.	+	+	.	+	1.1	+	1.1	1.1	.	+
Imperata cylindrica var. koenigii	H2	.	.	+	+	.	.	+	.	+	.	+	+
Miscanthus sinensis	H2	+	+	1.1	1.1	+	.	+	.	+	+	.	+
Lespedeza cuneata	H2	.	.	.	.	.	.	.	.	+	.	.	+
Erigeron annuus	H2	.	.	.	.	.	.	.	.	1.1	1.1	.	1.1
Arundinella hirta	H2	.	.	.	.	.	.	.	+	+	+	.	+
Erigeron canadensis	H2	+	+	.	.	.	1.1	.	.	+	1.1	.	+
Paederia scandens var. mairei	H2	.	+	+	+	.	+	+	+	+	.	.	+
Microstegium vimineum var. polystachyum	H2	1.1	1.1	.	1.1	+	.	.	.	.	.	.	.
Xanthium strumarium	H2	.	.	.	+	+	.	.	.	+	+	.	1.1
Amphicarpaea edgeworthii var. japonica	H1	.	.	.	.	.	.	.	.	+	+	+	.
Bidens frondosa	H2	+	1.1	.	.	.	+	.	.	+	+	.	+
Setaria viridis	H2	.	.	+	+	+	+	.	+	+	.	+	+
Equisetum arvense	H2	+	.	+	1.1	.	.	+	+	+	.	.	+
Torilis japonica	H2	.	.	+	.	.	+	.	.	.	.	.	.
Polygonum perfoliatum	H1	.	.	.	.	.	.	.	1.1	.	.	+	1.2
Erigeron bonariensis	H2	+	+	+	.	.	.	+	.	+	+	.	.
Picris hieracioides var. glabrescens	H2	.	.	.	.	.	.	.	.	+	+	+	+
Rumex japonicus	H2	.	.	.	+	.	+	.	.	+	.	+	+
Oenothera erythrosepala	H2	.	.	.	.	.	.	+	.	.	+	.	+
Phalaris arundinacea	H1	+	+	.	+	.	.	+	.	+	.	.	.
Boehmeria nipononivea	H2	.	.	+	.	.	.	+	.	.	+	.	+
Calystegia japonica	H2	.	.	+	.	.	+	.	.	+	.	.	+
Thalictrum minus var. hypoleucum	H2	.	.	.	.	.	.	+	.	.	.	+	+
Erigeron sumatrensis	H2	.	.	.	+	+	.	+	.	.	+	+	1.1
Chenopodium ambrosioides	H2	+	.	.	.	.	.	.	.	.	.	+	1.1
Melothria japonica	H2	.	.	.	.	.	.	.	.	.	.	.	+
Oenanthe javanica	H2	.	+	+	.	.	.	.	+	.	.	+	1.1
Lycium chinense	H2	.	.	+	+	+	.	.	.	.	+	.	.
Polygonum senticosum	H2	.	.	.	+	+	.	.	.	.	.	.	.

Species occurring in one plot (6) Azukia umbellata. (55) Boehmeria longispica. (21) Leucosceptrum japonicum

Table 6. Table showing the floristic composition of Shrubby vegetation Salix community

A : *Salix integra* Association
 a : *Salix gilgiana* Subassociation
 b : *Salix gracilistyla* Subassociation
 c : *Salix serissaefolia* Subassociation
 B : *Aphananthe aspera* - *Liriope platyphylla* community

Community type	(A)															(B)			
	(a)			(b)			(c)												
Record number	3	9	12	15	48	64	54	66	18	93	103	90	23	26	58				
Slope aspect	S10E	S20E	W	N15E	S20E	N60W	N40W	N65E	N80E	N45E	S50W	E	N45E	N60W	N30W				
Slope degree (°)	5	-	5	5	-	-	-	5	-	8	5	-	8	10	15				
Size of quadrat (m x m)	10x12	12x13	10x15	15x15	15x15	15x15	15x15	10x15	10x15	5x10	5x10	8x10	8x10	10x10	15x8				
Height of Tree layer-1 (m)	-	-	-	-	-	-	-	-	-	-	-	-	-	8.0	9.3	8.5			
Coverage of Tree layer-1 (%)	-	-	-	-	-	-	-	-	-	-	-	-	-	65	60	70			
Height of Tree layer-2 (m)	6.2	6.0	4.5	5.5	6.0	5.0	4.5	4.8	5.0	5.0	6.0	6.5	3.8	4.0	4.2				
Coverage of Tree layer-2 (%)	65	70	60	65	70	60	70	80	80	20	25	40	20	30	30				
Height of Shrub layer (m)	2.5	2.5	2.0	2.0	2.2	1.8	2.0	1.8	2.0	2.0	2.2	2.0	2.1	2.3	2.0				
Coverage of Shrub layer (%)	40	35	35	30	30	35	30	40	35	65	50	70	35	30	30				
Height of Herb layer (m)	1.5	1.5	1.3	1.5	1.5	1.3	1.5	1.3	1.5	0.8	1.0	1.6	0.5	0.7	0.5				
Coverage of Herb layer (%)	60	40	45	60	75	60	45	70	40	35	30	45	50	55	45				
Moss (%)	.	.	.	+	.	+	.	+	+	.	.	.	+	+	+				
Total of species	14	10	12	9	13	12	13	16	13	17	16	14	22	27	26				
<u>Character spp. and differential spp. of <i>Salix integra</i> Association</u>																			
<i>Salix integra</i>	S	1.1	1.1	1.1	1.1	+	+	1.1	2.2	1.1	1.1	1.1	1.1	.	.	.			
<i>S. chaenomeloides</i>	T2	3.4	4.4	3.3	3.4	4.4	3.3	1.1	1.2	2.2	.	.	.	.	.	.
	S	2.2	1.1	1.2	1.1	1.1	1.1	+	+	1.1	.	.	.	.	.	.
<u>Differential spp. of <i>Salix gilgiana</i> Subassociation</u>																			
<i>Salix gilgiana</i>	T2	+	.	+	.	+	.	2.2	2.2	1.2	.	.	.	.	.	.
<i>S. subfragilis</i>	T2	1.1	1.2	2.2	+	.	.	1.2	2.2	2.2	.	.	.	.	.	.
<u>Differential spp. of <i>Salix gracilistyla</i> Subassociation</u>																			
<i>Salix gracilistyla</i>	S	.	.	.	.	.	.	.	.	.	3.3	2.2	1.2	.	.	.			
<u>Differential spp. of <i>Salix serissaefolia</i> Subassociation</u>																			
<i>S. serissaefolia</i>	T2	.	.	.	.	.	.	.	.	.	1.1	1.2	2.2	.	.	.			
<u>Differential spp. of <i>Aphananthe aspera</i> - <i>Liriope platyphylla</i> community</u>																			
<i>Aphananthe aspera</i>	T1	.	.	.	.	.	.	.	.	.	.	.	.	2.3	2.2	3.3			
	T2	.	.	.	.	.	.	.	.	.	.	.	.	+	1.1	+			
	S	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.
<i>Celtis sinensis</i> var. <i>japonica</i>	T2	.	.	.	.	.	.	.	.	.	.	.	.	+	+	1.1			
	S	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.
<i>Zelkova serrata</i>	T1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.1			
	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	+
<i>Liriope platyphylla</i>	H	.	.	.	.	.	.	.	.	.	.	.	.	1.1	+	+			
<u>Character spp. and differential spp. of <i>Phragmitetea</i></u>																			
<i>Phragmites communis</i>	H	2.2	1.1	1.1	1.1	1.1	2.2	2.2	2.2	1.1	.	.	.	.	.	.
<i>Miscanthus sacchariflorus</i>	H	.	.	.	1.1	.	+	.	.	.	.	.	.	.	.	.
<i>Phragmites japonica</i>	H	.	.	.	.	.	.	.	.	.	1.2	1.1	2.2	.	.	.			
<i>Zizania latifolia</i>	H	+	.	.	.	+	.	+	1.1	.	.	.	.	.	.	.
<u>Character spp. and differential spp. of <i>Miscanthion sinensis</i> alliance</u>																			
<i>Miscanthus sinensis</i>	H	.	.	.	.	.	.	.	.	.	.	.	.	1.1	+	+			
<i>Arundinaria pygmaea</i> var. <i>glabra</i>	H	.	.	.	.	.	.	.	.	.	.	.	.	+	+	1.1			
<u>Character spp. and differential spp. <i>Quercetum serratae</i> order</u>																			
<i>Mallotus japonicus</i>	S	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+
<i>Clerodendrum trichotomum</i>	S	.	.	.	.	.	.	.	.	.	.	.	.	+	1.1	.			
<i>Rhus javanica</i>	S	.	.	.	.	.	.	.	.	.	.	.	.	+	+	.
<u>Character spp. and differential spp. of <i>Camellia japonica</i> class</u>																			
<i>Quercus glauca</i>	S	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.1			
<i>Cinnamomum japonicum</i>	S	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+
<i>Camellia japonica</i>	S	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+
<i>Neolitsea sericea</i>	S	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+
<i>Aucuba japonica</i>	S	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+
<i>Ligustrum obtusifolium</i>	S	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+
<i>Ophiopogon japonicus</i>	H	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+
<u>Companions</u>																			
<i>Artemisia princeps</i>	H	2.2	.	.	.	.	.	.	.	1.1	+	1.1	+	+	+				
<i>Dioscorea tokoro</i>	S	.	.	.	.	.	.	.	.	.	.	.	.	+	+	+
<i>Paederia scandens</i> var. <i>mairei</i>	S	.	+	+	+	.	+	+	.	1.1	+	1.1	+	1.1	+				
<i>Humulus japonicus</i>	S	.	+	.	+	.	+	+	.	+	+	+	+	.	.	.			
<i>Rosa multiflora</i>	S	.	.	.	1.1	.	1.1	.	1.1	+	.	+	+	1.1	1.1	+			
<i>Phalaris arundinacea</i>	H	1.1	1.1	+	.	1.2	.	+	2.2	+	1.1	+	1.1	+	.	.			
<i>Microstegium vimineum</i> var. <i>polystachum</i>	H	+	.	.	.	1.1	.	+	.	.	+	1.1	+	.	.	.			
<i>Agrimonia pilosa</i>	H	.	.	.	.	.	.	.	.	.	+	+	+	+	+	+
<i>Achyranthes japonica</i>	H	.	.	+	1.1	.	1.1	.	+	.	.	+	+	+	+	+			
<i>Pilea mongolica</i>	H	.	.	.	.	.	.	.	.	.	+	+	+	+	+	+
<i>Oplismenus undulatifolius</i> var. <i>japonicus</i>	H	+	1.1	1.1	.	1.1	.	+	+	+	+	+	.	.	.	.
<i>Polygonum thunbergii</i>	H	1.1	+	.	.	1.1	.	.	1.1	+	1.1	1.1	1.1	.	.	.			
<i>Oenanthe javanica</i>	H	1.1	+	.	.	+	.	1.1	+	1.1	+	+	.	.	.	.
<i>Bidens frondosa</i>	H	+	.	+	.	+	+	+	+	.	.	.	+	.	.	.			
<i>Glycine soja</i>	H	+	.	+	.	1.1	+	.	.	+	.	.	.	.	+	+
<i>Commelina communis</i>	H	.	.	.	.	1.1	+	+	.	+	+	+	.	+	.	.			
<i>Arthraxon hispidus</i>	H	.	.	+	.	.	+	.	.	.	+	.	.	.	.	.

Species occurring in one plot (23) *Athyrium niponicum*, *Carex lenta* var. *lenta*, *Chamaele decumbens*. (26) *Morus alba*, *Broussonetia kazinoki*, *Deutzia crenata*, *Zanthoxylum ailanthoides*, *Melothria japonica*. (58) *Quercus variabilis*, *Trachycarpus fortunei*, *Kadsura japonica*, *Smilax china*, *Glechoma hederacea* var. *grandis*.

21. Zu K. Suzuki vgl. im Text 「Vegetation und Landschaft Japans」 1979 (p. 303-314)

Table 5. Synthetic table on *Peucedanion japonicae* in the Ryukyu Islands

1:*Astero asa-gray-Zoysietum tenuifoliae*
 2:*Viola utchinensis-Adiantum capillus veneris-community*
 3-4:*Portulaca pilosa var. okinawensis-Zoysia tenuifolia-community*
 3:Typical undercommunity, 4:Undercommunity of *Sedum oryzifolium*
 5-6:*Astero miyagii-Miscantheum condensatii*
 5:Subassociation of *Zoysia tenuifolia*, 6:Typical subassociation
 7-9:*Chrysanthemum crassi-Crepidiastretum lanceolati*
 7:Subassociation of *Wedelia biflora*, 8:Typical subassociation,
 9:Subassociation of *Wedelia chinensis*
 10:*Nephrolepis auriculata-Peperomia japonica-community*
 11:*Belamcanda chinensis-Miscanthus sinensis var. condensatus-community*
 12-13:*Pennisetum sordidum*

	1	2	3	4	5	6	7	8	9	10	11	12	13
Total no. of relevé:	8	4	8	15	10	10	2	2	3	6	9	14	5
Average no. of component species:	9.3	12.3	3.9	5.8	8.4	8.5	7.0	7.5	7.3	11.4	28.9	7.3	12.2
<u>Character species of association:</u>													
<i>Aster asa-gray</i>	V(4-3)	.	.	.	.	.	.	.	.	.	.	.	.
<u>Differential species of community:</u>													
<i>Viola utchinensis</i>	.	4(1+)	.	.	.	.	.	.	.	.	.	.	.
<i>Adiantum capillus-veneris</i>	.	4(1+)	.	.	.	.	.	.	.	.	.	.	.
<i>Amitostigma lepidum</i>	.	2(+)	.	.	.	.	.	.	.	.	.	.	.
<u>Differential species of community:</u>													
<i>Portulaca pilosa ssp. okinawensis</i>	.	.	III(2+) II(2+)	.	.	.	.	.	.	.	.	+(+)	.
<i>Digitaria henryi</i>	I(+)	.	II(1+) II(1+)	.	.	.	.	.	.	.	.	.	II(+)
<u>Differential species of community:</u>													
<i>Setaria viridis var. pachystachys</i>	.	.	.	IV(+)	.	+(+)	.	.	1(+)	I(+)	.	II(+)	V(+)
<i>Sedum oryzifolium</i>	.	.	.	V(3+)	.	.	.	.	.	I(+)	.	IV(2+)	I(+)
<u>Differential species of association (community):</u>													
<i>Zoysia tenuifolia</i>	V(2+)	4(3-2)	V(5-3)	V(5-2)	V(3+)	.	.	1(2)	.	.	.	+(+)	I(+)
<u>Character species of association:</u>													
<i>Aster miyagii</i>	.	.	.	.	IV(4+) IV(1+)	.	.	.	.	.	.	.	.
<u>Character species of association:</u>													
<i>Chrysanthemum ornatum var. crassum</i>	.	.	.	.	.	.	2(3)	2(5-2)	3(2+)	II(1+)	II(+)	.	.
<i>Cirsium brevicaulis var. irumtiense</i>	.	.	.	.	.	.	.	1(+)	2(+)	.	.	.	.
<u>Differential species of subassociation:</u>													
<i>Wedelia biflora</i>	.	.	.	.	.	.	2(1+)	.	.	.	.	.	.
<i>Ischaemum aureum</i>	IV(1+)	4(+)	.	.	II(3+)	+(+)	2(2)	.	.	.	.	.	.
<u>Differential species of subassociation:</u>													
<i>Wedelia chinensis</i>	.	.	.	.	.	.	.	.	3(3)	.	.	.	.
<i>Ixeris debilis var. liukiensis</i>	.	.	.	.	.	.	.	.	2(1)	.	.	.	.
<u>Differential species of community:</u>													
<i>Peperomia japonica</i>	.	.	.	.	.	.	.	.	.	V(1+)	.	.	.
<i>Boehmeria gigantea</i>	.	.	II(+)	I(1)	.	.	.	.	.	IV(+)	II(+)	.	.
<i>Nephrolepis auriculata</i>	.	.	.	.	.	.	.	.	.	V(4+)	IV(1+)	.	.
<u>Differential species of community:</u>													
<i>Thelypteris acuminata</i>	.	.	.	.	.	.	.	.	.	.	IV(1+)	.	.
<i>Belamcanda chinensis</i>	.	.	.	I(+)	.	.	.	.	.	I(+)	V(1+)	.	.
<i>Ormocarpum cochinchinense</i>	.	.	.	.	.	.	.	.	.	.	IV(1+)	.	.
<i>Rubus sieboldi</i>	.	.	.	.	.	.	.	.	.	.	V(1+)	.	.
<u>Character & differential species of association:</u>													
<i>Pennisetum sordidum</i>	.	.	II(1+)	II(+)	.	.	.	1(+)	.	.	.	V(5-3)	V(4-2)
<i>Asparagus cochinchinensis</i>	.	.	II(+)	+(+)	.	.	.	.	.	.	.	III(+)	III(+)
<i>Leucas javanica</i>	.	.	.	.	.	.	.	.	.	I(+)	.	.	III(+)
<u>Character & differential species of alliance & order:</u>													
<i>Crepidiastrum lanceolatum</i>	III(+)	4(2-1)	.	+(+)	V(3+)	V(2+)	.	2(2-1)	3(2)	.	IV(1+)	I(+)	II(+)
<i>Carex oahuensis var. robusta</i>	II(1+)	4(+)	.	.	I(+)	IV(2+)	.	.	.	IV(2+)	V(2+)	III(2+)	.
<i>Peucedanum japonicum</i>	II(+)	3(+)	.	I(+)	II(1+)	I(2-1)	.	2(2-1)	.	.	V(2+)	.	.
<i>Farfugium japonicum</i>	V(1+)	.	.	.	II(1+)	I(3+)	1(+)	1(+)	.	.	IV(1+)	.	.
<i>Cirsium brevicaulis</i>	V(1+)	1(+)	.	I(1)	I(+)	+(1)	.	.	.	.	.	.	II(+)
<i>Lysimachia skokiana</i>	.	.	III(+)	III(+)	.	.	.	1(+)	3(1+)	I(+)	.	IV(+)	IV(+)
<i>Lilium longiflorum</i>	III(+)	1(+)	II(+)	.	II(1+)	.	.	.	.	.	.	.	.
<i>Dianella ensifolia</i>	.	.	.	.	II(2+)	III(2+)	.	.	.	.	V(+)	.	.
<i>Miscanthus sinensis var. condensatus</i>	.	2(1)	.	.	IV(4-1)	V(5-1)	.	.	.	.	IV(4-1)	.	.
<i>Sedum formosanum</i>	.	.	II(1+)	.	.	.	.	.	.	II(1+)	.	.	.
<i>Cyrtomium falcatum</i>	.	.	.	.	.	.	.	.	.	.	II(+)	.	I(+)
<i>Sphenomeris biflora</i>	.	.	.	.	+(+)	+(+)	.	.	.	.	.	.	.
<u>Character & differential species of class:</u>													
<i>Miscanthus sinensis</i>	.	.	.	.	.	.	2(4)	1(2)	2(+)	.	.	III(+)	.
<i>Solidago virga-aurea var. isularis</i>	.	.	.	.	I(+)	+(+)	.	.	.	.	.	.	.
<i>Breynia officinalis</i>	.	.	.	.	.	.	1(+)	.	.	.	III(+)	.	.
<i>Securinega suffruticosa</i>	.	.	.	.	.	.	.	.	.	II(+)	IV(+)	.	.
<i>Centella asiatica</i>	.	.	.	.	.	.	.	.	.	II(2+)	II(+)	.	.
<i>Lygodium japonicum f. elongatum</i>	.	.	.	.	.	.	.	.	.	.	V(+)	.	.

22. Zu M. Simoda and H. Suzuki vgl. im Text 「Vegetation und Landschaft Japans」 1979 (p. 315-323)

Table 1: Annual shore communities

- | | | |
|--|---|--|
| 1. <i>Scirpus lineolatus</i> community | 2. <i>Deinostema violaceum</i> community | 3. <i>Eriocaulon sikokiana</i> community |
| a. Typical group | a. Typical group | a. Typical group |
| b. <i>Eleocharis congesta</i> group | b. <i>Eleocharis congesta</i> group | b. <i>Eleocharis congesta</i> group |
| | c. <i>Ischaemum aristatum</i> var. <i>glaucum</i> group | c. <i>Lysimachia fortunei</i> group |

		1		2			3		
		a	b	a	b	c	a	b	c
Number of relevés		5	5	6	5	5	9	8	5
Average number of species		6	6	4	5	8	6	7	11
Ch	<i>Deinostema violaceum</i>	IV ⁺²	II ¹⁻²	V ⁺²	IV ⁺³	III ¹⁻³	IV ⁺³	IV ⁺¹	III ¹⁻²
	<i>Utricularia bifida</i>	III ⁺²	III ⁺¹	IV ⁺¹	III ⁺¹	IV ⁺²	IV ⁺¹	III ⁺¹	III ⁺
	<i>Eriocaulon atrum</i>	II ⁺⁴	II ¹⁻²	V ⁺⁴	I ⁺	IV ¹⁻²	II ⁺⁴	II ²⁻³	III ¹⁻²
	<i>Eriocaulon hondoense</i>	II ⁺³	I ¹	II ¹⁻⁴	III ¹⁻²	I ¹	II ⁺²	IV ⁺¹	II ⁺
	<i>Coelachne japonica</i>	III ⁺¹	I ¹	I ¹	III ¹⁻²	.	II ¹⁻²	III ⁺⁵	I ⁺
	<i>Sacciolepis indica</i> var. <i>oryzatorum</i>	I ¹	.	I ¹	.	.	II ¹⁻²	III ⁺¹	II ²⁻³
	<i>Eriocaulon japonicum</i>	I ²	I ¹	I ²	II ³⁻⁵	I ²	II ⁺¹	III ⁺¹	.
	<i>Utricularia racemosa</i>	.	I ¹	I ⁺	.	.	III ⁺¹	II ⁺¹	I ⁺
	<i>Lobelia chinensis</i>	I ¹	I ⁺	I ⁺	.	II ²	.	I ²	III ⁺³
	D1	<i>Scirpus lineolatus</i>	V ¹⁻⁵	V ²⁻⁵	.	.	.	.	.
D3	<i>Eriocaulon sikokiana</i>	.	.	.	.	.	V ¹⁻⁵	V ⁺⁵	III ⁺¹
	<i>Juncus papillosus</i>	.	.	.	.	.	II ⁺¹	IV ⁺³	II ⁺¹
	<i>Scirpus juncooides</i>	.	.	.	.	.	II ³⁻⁵	III ¹	II ¹
	<i>Hololeion krameri</i>	.	.	.	.	.	II ⁺	I ⁺	IV ⁺²
	<i>Eleocharis wichuræ</i>	.	.	.	.	.	II ⁺³	.	I ⁺
Db-c	<i>Eleocharis congesta</i>	.	III ⁺²	.	V ⁺³	V ¹⁻⁵	.	V ⁺⁴	V ⁺⁵
	<i>Myriophyllum ussuriense</i>	.	II ²⁻³	.	.	II ¹⁻²	.	I ⁺	.
Dc	<i>Ischaemum aristatum</i> var. <i>glaucum</i>	I ⁺	.	.	.	IV ²⁻³	.	.	IV ⁺²
	<i>Lysimachia fortunei</i>	.	I ²	.	.	IV ¹⁻²	.	.	IV ¹⁻⁵
	<i>Isachne globosa</i>	.	.	.	.	IV ¹⁻²	I ⁺	.	II ¹⁻³
	<i>Paspalum orbiculare</i>	.	.	.	.	III ⁺²	.	.	II ¹⁻²
C	<i>Hypericum japonicum</i>	.	.	.	.	.	.	II ⁺¹	.
	<i>Haloragis micrantha</i>	.	.	.	.	.	II ⁺	.	I ⁺
	<i>Centipeda minima</i>	.	.	.	II ⁺¹	.	.	.	.
	<i>Bidens frondosa</i>	.	.	.	I ⁺	.	I ⁺	.	.
	<i>Leersia japonica</i>	.	I ¹	.	I ¹	.	.	.	.
	<i>Fimbristylis autumnalis</i>	.	.	.	.	I ⁺	.	.	I ⁺
	<i>Fimbristylis complanata</i>	.	.	.	.	II ⁺¹	.	.	.
	<i>Eriocaulon decemflorum</i>	.	.	.	.	I ¹	.	.	I ⁺
	<i>Utricularia yakusimensis</i>	.	I ⁺	I ¹	.
	<i>Eriocaulon sekimotoi</i>	.	I ³	.	.	.	I ⁺	.	.
and others		.	.	.	.	.	.	.	.

Ch: character & differential species of higher units

D: differential species

C: companions

Table 3: Sedge swamp communities

1. *Carex thunbergii* community
 - a. *Typha orientalis* group
 - b. *Phragmites communis* group
2. *Carex dispalata* community

		1		2
		a	b	
	Number of relevés	1	2	3
	Average number or species	7	8	4
D1	<i>Carex thunbergii</i>	1 ⁵	2 ⁵	.
D1a	<i>Typha orientalis</i>	1 ³	.	.
	<i>Ischaemum aristatum</i> var. <i>glaucum</i>	1 ³	.	.
	<i>Isachne globosa</i>	1 ²	.	.
	<i>Lysimachia fortunei</i>	1 ²	.	.
D1b	<i>Phragmites communis</i>	.	2 ³	3 ²⁻⁴
	<i>Viola verecunda</i>	.	2 ²⁻³	1 ¹
	<i>Sphagnum palustre</i>	.	2 ²⁻⁵	.
D2	<i>Carex dispalata</i>	.	.	3 ⁵
C	<i>Alnus japonica</i>	.	1 ⁺	1 ¹
	<i>Epilobium pyrricholophum</i>	.	1 ⁺	1 ¹
	<i>Juncus wallichianus</i>	1 ¹	.	.
	<i>Hypericum laxum</i>	1 ⁺	.	.
	<i>Eleocharis wichurae</i>	.	1 ¹	.
	<i>Juncus papillosus</i>	.	1 ²	.
	<i>Cyperus haspan</i>	.	1 ⁺	.
	<i>Salix gracilistyla</i>	.	.	1 ³
	<i>Sagittaria trifolia</i>	.	.	1 ⁺

Table 5: Alderwood communities

1. *Alnus japonica*-*Carex dispalata* community
2. *Alnus japonica*-*Moliniopsis japonica* community
 - a. Typical group
 - b. *Isachne globosa* group

		1	2	
			a	b
Number of relevés		4	3	4
Average number of species		17	13	19
<i>Alnus japonica</i>		4 ²⁻⁵	3 ²⁻⁵	4 ²⁻⁵
D1	<i>Carex dispalata</i>	4 ³⁻⁴	.	.
D2	<i>Moliniopsis japonica</i>	2 ⁺	3 ¹⁻⁵	4 ²⁻⁵
	<i>Miscanthus sinensis</i>	.	1 ⁺	3 ⁺²
	<i>Pinus densiflora</i>	.	2 ⁺²	1 ³
	<i>Lycopus maackianus</i>	.	1 ⁺	2 ¹⁻³
	<i>Epipactis thunbergii</i>	.	2 ⁺¹	1 ⁺
	<i>Juniperus rigia</i>	.	1 ¹	2 ⁺
D2b	<i>Isachne globosa</i>	3 ¹	.	4 ⁺³
	<i>Cirsium sieboldii</i>	4 ²⁻³	.	2 ⁺¹
	<i>Sphagnum palustre</i>	3 ⁺²	.	2 ⁺²
	<i>Eupatorium lindleyanum</i>	1 ⁺	.	3 ⁺¹
C	<i>Ilex crenata</i>	3 ¹⁻²	3 ¹⁻⁴	4 ¹⁻³
	<i>Rosa wichuraiana</i>	4 ¹	1 ⁺	4 ¹⁻³
	<i>Arundinaria pygmaea</i>	2 ¹⁻³	3 ⁺²	3 ¹⁻³
	<i>Aster rugulosus</i>	4 ⁺¹	1 ⁺	3 ⁺¹
	<i>Rhamnus crenata</i>	2 ¹	1 ⁺	3 ⁺¹
	<i>Ischaemum aristatum</i> var. <i>glaucum</i>	3 ¹	2 ¹	.
	<i>Ilex serata</i>	2 ¹	2 ⁺¹	1 ⁺
	<i>Phragmites communis</i>	3 ¹⁻⁴	1 ³	1 ¹
	<i>Paederia scandens</i>	2 ¹⁻²	.	2 ⁺¹
	<i>Viola verecunda</i>	2 ¹	2 ⁺	.
	<i>Lonicera japonica</i>	3 ⁺²	.	1 ¹
	<i>Allium thunbergii</i>	1 ²	1 ⁺	1 ¹
	<i>Equisetum arvense</i>	2 ⁺²	.	1 ¹
	<i>Hosta longissima</i> var. <i>brevifolia</i>	1 ⁺	.	1 ⁺
	<i>Ilex pedunculosa</i>	1 ¹	1 ⁺	.
	<i>Rhus trichocarpa</i>	1 ⁺	.	1 ⁺
	<i>Smilax china</i>	1 ⁺	1 ⁺	.
	<i>Carex maximowiczii</i>	2 ⁺	.	.
	<i>Lobelia sessilifolia</i>	2 ⁺¹	.	.
	<i>Scirpus wichurae</i>	.	1 ⁺	1 ⁺
	<i>Gentiana scabra</i>	.	1 ⁺	1 ⁺
	and others			

Table 1. Moliniopsis - Rhynchosporion albae

- Communities: 1) Moliniopsis - Sphagnetum pulchri Miyawaki et Kazue Fujiwara 1970
 2) Eriocaulum dimorphoelytri Miyawaki et Kazue Fujiwara 1970
 3) Rhynchospora fauriei - Caricetum limosae Miyawaki et Kazue Fujiwara 1970
 4) Eriophoro gracilis - Caricetum limosae Miyawaki et Kazue Fujiwara 1966
 5) Rhynchospora alba - yasudanae Miyawaki et Kazue Fujiwara 1970
 6) Eriocaulum monococci Miyawaki et Kazue Fujiwara 1970
 7) Sphagnetum takedai H. Suzuki, N. Yano, Y. Matsuda et Y. Hada 1979
 8) Eriocaulum atroidis H. Suzuki, N. Yano, Y. Matsuda et Y. Hada 1979
 9) Sphagnetum triseripori ass. nov.

Number of communities:	1)				2)				3)				4)				5)				6)				7)				8)				9)																
Number of record:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42							
Number of relevés:	18	11	5	17	3	5	8	3	4	10	15	8	8	6	5	13	7	3	7	5	5	7	6	4	4	11	10	5	7	7	6	4	13	8	7	11	7	3	5	3	5	16							
Character taxa of the association and differential																																																	
taxa of under unit:																																																	
Sphagnum pulchrum	V	III	V	V	3	V	V																																						IV				
Eriocaulon dimorphoelytrum																																																	
Rhynchospora fauriei																																																	
Oxycoccus quadripetalus																																																	
Sphagnum amblyphyllum																																																	
Hosta albo-marginata																																																	
Lycopus maackianus																																																	
Lastrea thelypteris																																																	
Eriophorum gracile																																																	
Rhynchospora yasudana																																																	
Eriophorum vaginatum																																																	
Sanguisorba officinalis																																																	
Eleocharis wichurae																																																	
Carex michauxiana var. asiatica																																																	
Eriocaulon monococcon																																																	
Carex lasiocarpa var. occultans																																																	
Sphagnum guwassanense subsp. takedae																																																	
Cladopodiella fluitans																																																	
Eriocaulon atroides																																																	
Sphagnum guwassanense subsp. triseriporum																																																	
Fauria crista-galli																																																	
Tilingia ajanensis																																																	
Carex omiana var. monticola																																																	
Primula nipponica																																																	
Scirpus caespitosus																																																	
Geum pentapetalum																																																	
Character taxa of higher units:																																																	
Rhynchospora alba																																																	
Drosera anglica																																																	
Lycopodium inundatum																																																	
Scheuchzeria palustris																																																	
Sphagnum cuspidatum																																																	
Carex limosa																																																	
Companions:																																																	
Drosera rotundifolia																																																	
Carex omiana																																																	
Carex middendorffii																																																	
Utricularia intermedia																																																	
Tofieldia japonica																																																	
Moliniopsis japonica																																																	
Sphagnum papillosum																																																	
Iris laevigata																																																	
Sphagnum tenellum																																																	
Andromeda polifoliata																																																	
etc.																																																	

Locality: 1,12: Hokkaido by Tx. in 1968, 2: Sarobetsu in Hokkaido by A.M.,S.O.,K.F. & K.I. in 1976, 3: 3-11,13,15,20,28-33: Ozegahara-Moor by A.M. & K.F. in 1970, 14,16-19,22-27,35-37: Pref. Nagano by Y.Matsuda in 1972-1974, 21: Senjogahara-Moor in Pref. Tochigi by M.Tatewaki, H.Suzuki, K.Ishizuka & T.Suzuki in 1968, 34: Tsugaru-Peninsula in Pref. Aomori by R.et K.F. in 1974, 38: Hachimantai-Moor in Pref. Akita by A.M.,K.F. etc. in 1970, 39-42: Gassan-Moor in Pref. Yamagata by K.Ishizuka, R.et K.F. & Y.Matsuda in 1970.

28. Zu K. Fujiwara vgl. im Text 'Vegetation und Landschaft Japans' 1979 (p. 325-332)

Table 2. Eriocaulo-Rhynchosporion fujiianae

Communities: 1) *Juncus wallichianus*-*Rhynchospora faberi*-ass. prov.

2) *Schoenus apogon*-*Eriocaulon hondoensis*-community

3) *Rhynchosporium faberi* ass. nov.

4) *Eriocaulum nudicuspis* Krauchi 1978

5) *Rhynchospora brownii*-community

6) *Rhynchosporium chinensis* ass. nov.

7) *Utricularia yakushimensis*-*Eriocaulum sikokiani* ass. nov.

8) *Rhynchospora fauriei*-*Sphagnum palustris* ass. nov.

9) *Eriocaulum echinulatum* ass. nov.

10) *Eriocaulum hananoegoense* ass. nov.

Number of communities:	1)	2)	3)	4)	5)	6)	7)	8)	9)	10)
Number of record:	1	2	3	4	5	6	7	8	9	10
Number of relevés:	13	5	10	4	10	5	13	7	5	8
Character- and differential taxa of the associations:										
<i>Parnassia palustris</i>	IV	.	.	.	.	.	.	.	.	.
<i>Inula ciliaris</i>	V	.	.	.	IV	.	.	.	.	.
<i>Sanguisorba tenuifolia</i> var. <i>alba</i>	V	.	.	.	.	.	.	.	.	.
<i>Juncus yokoscensis</i>	V	.	.	.	.	.	.	.	.	.
<i>Ischaemum antheophoroides</i>	III	.	.	.	.	.	.	.	.	.
<i>Juncus wallichianus</i>	IV	.	.	.	.	.	.	.	.	.
<i>Lycopus maackianus</i>	V	.	.	.	.	.	.	.	.	.
<i>Schoenus apogon</i>	.	V	.	.	.	.	.	.	.	.
<i>Eriocaulon hondoensis</i>	.	V	.	.	.	.	.	.	.	.
<i>Drosera peltata</i> var. <i>nipponica</i>	.	V	.	.	.	.	.	.	.	.
<i>Rhynchospora faberi</i>	I	V	3	V	V	V	II	.	.	.
<i>Utricularia racemosa</i>	.	V	V	I	V	V	V	.	.	.
<i>Eriocaulon nudicuspis</i>	.	.	.	.	.	.	V	.	.	.
<i>Rhynchospora brownii</i>	.	.	.	.	.	.	V	V	.	.
<i>Hosta longissima</i> var. <i>brevifolia</i>	.	.	.	.	.	.	IV	V	.	.
<i>Parnassia foliosa</i> var. <i>nummularia</i>	.	.	.	.	.	.	IV	V	.	.
<i>Hololeion krameri</i>	.	.	.	.	.	.	V	V	.	.
CT <i>Rhynchospora chinensis</i>	.	.	.	.	II	II	V	V	.	4
CT <i>Utricularia yakusimensis</i>	.	V	III	.	.	.	V	IV	IV	V
<i>Sphagnum palustre</i>	.	.	.	.	.	.	V	V	V	V
<i>Eriocaulon echinulatum</i>	.	.	.	.	.	.	.	.	.	V
<i>Machaerina nipponensis</i>	.	.	.	.	.	.	.	.	.	V
<i>Drosera indica</i>	.	.	.	.	.	.	.	.	.	V
<i>Rhynchospora rubra</i>	.	.	.	.	.	.	.	.	.	V
<i>Eriocaulon hananoegoense</i>	.	.	.	.	.	.	.	.	.	V
<i>Hypericum laxum</i>	.	.	.	.	.	.	.	.	.	V
<i>Eleocharis congesta</i>	.	.	.	.	.	.	.	.	.	V
<i>Juncus monticola</i>	.	.	.	.	.	.	.	.	.	V
Character- and differential taxa of the alliance:										
<i>Dimeria ornithopoda</i> var. <i>tenera</i>	.	.	III	.	V	V	.	V	II	II
<i>Sphagnum microporum</i>	.	.	.	3	V	.	.	V	II	II
<i>Habenaria radiata</i>	.	V	V	.	.	.	.	V	V	V
<i>Utricularia bifida</i>	.	V	III	.	V	III	II	II	V	V
<i>Isachne globosa</i>	V	V	V	.	V	III	III	V	V	V
<i>Scirpus hotarui</i>	II	.	.	2	III	.	.	V	V	V
<i>Eriocaulon sikokianum</i>	V	.	.	.	V	.	.	V	V	V
<i>Eriocaulon miquelianum</i>	.	.	.	.	V	.	.	V	V	V
<i>Rhynchospora fujiiana</i>	.	.	.	.	V	.	.	V	V	V
<i>Cirsium sieboldii</i>	.	V	.	4	II	.	.	V	V	V
<i>Rhynchospora fauriei</i>	V	.	V	3	V	.	.	V	V	V
<i>Rhynchospora alba</i>	.	.	II	.	V	.	.	V	V	V
Companions:										
<i>Drosera rotundifolia</i>	II	V	V	1	V	.	IV	III	V	.
<i>Carex omiana</i>	V	.	.	.	.	.	V	V	V	V
<i>Moliniopsis japonica</i>	.	.	.	2	V	.	V	V	V	V
<i>Lobelia sessilifolia</i>	V	.	.	.	V	.	.	V	V	V
<i>Phragmites australis</i>	II	V	II	4	V	.	.	V	V	V
<i>Viola verecunda</i>	.	.	.	.	V	.	.	V	V	V
<i>Carex thunbergii</i>	V	.	.	.	V	.	.	V	V	V
etc.	.	.	.	.	V	.	.	V	V	V

Locality: 1: Shimokita Peninsula in Aomori Pref. by Y.S., K.F. etc. in 1973, 2: Naruto-cho in Chiba Pref. by N. Ohga in 1968, 3: Koshijihara-Moor in Niigata Pref. by Y. Aizawa, K. Senuma, T. Takahashi, K. Yamamoto in 1976, 4,5,9-10: Hiroshima Pref. by Tx. in 1968, 6,7,11-17: Okayama Pref. by Y. Hada in 1972-73, 8: Imo-Moor in Nagoya by K. Krauchi in 1978, 18: Miyazaki Pref. by R. et K.F., K.K. et M.K. in 1978. 19: Hananoego-Moor, Yakushima in Kagoshima Pref. by R. et K.F. etc. in 1978.

29. Zu K. Fujiwara vgl. im Text 「Vegetation und Landschaft Japans」 1979 (p. 325-332)

Table 3. *Eriocaulum monococci*

Running number of table:	1	2	3	4	5	6	7	8
Number of relevé:	291	288	290	292	289	286	295	297
Elevation (m):	10	10	10	10	10	10	10	10
Size of relevé (m ²):	25	0.8	2	25	2	1	4	2
Height of herb layer-1 (cm):	100	-	-	100	-	100	-	-
Cover degree of herb layer-1 (%):	5	-	-	5	-	20	-	-
Height of herb layer-2 (cm):	60	60	50	60	80	40	60	50
Cover degree of herb layer-2 (%):	80	80	80	70	80	80	85	70
Total number of species:	8	8	9	10	10	11	15	15
<u>Character- and differential taxa of the association:</u>								
<i>Eriocaulum monococcon</i>	+	2.2	3.3	+	2.2	2.2	3.3	3.3
<i>Carex lasiocarpa</i> var. <i>occultans</i>	5.4	4.4	4.4	5.4	4.4	4.4	2.2	3.3
<u>Character taxa of higher unit:</u>								
<i>Scheuchzeria palustris</i>	1.2	1.2	+2	1.2	1.2	.	.	1.2
<i>Sphagnum pulchrum</i>	.	5.4	4.4	.	5.5	4.4	+2	2.2
<i>Rhynchospora alba</i>	+	.	.	+2	.	1.2	1.2	3.3
<u>Companions:</u>								
<i>Triadenum japonicum</i>	+	1.2	+2	+	1.2	2.2	+2	1.2
<i>Phragmites australis</i>	H1, H2	1.2	+2	+	1.2	2.2	.	.
<i>Lobelia sessilifolia</i>	.	+	2.2	+2	+2	1.2	+	1.2
<i>Menyanthes trifoliata</i>	+	.	.	+	.	.	+	+
<i>Oxycoccus quadripetalus</i>	.	1.2	.	.	+	.	1.2	+
<i>Hosta rectifolia</i>	.	.	+	.	+	.	.	+
<i>Habenaria sagittifera</i>	.	.	+	.	+	.	.	.
<i>Sanguisorba tenuifolia</i> f. <i>alba</i>	.	.	.	.	+	+	.	.
<i>Drosera rotundifolia</i>	.	.	.	.	.	.	+2	+
<i>Rhynchospora fauriei</i>	.	.	.	.	.	.	1.2	+2
<i>Utricularia vulgaris</i> var. <i>japonica</i>	+	.	.	+	.	.	.	.
<i>Lysimachia davurica</i>	.	.	+	.	+	.	.	.
<i>Carex thunbergii</i>	.	.	.	.	.	+	.	.
<i>Lycopus maackianus</i>	.	.	.	.	.	.	+2	.
<i>Iris ensata</i> var. <i>spontanea</i>	.	.	.	.	.	.	+	.
<i>Thelypteris palustris</i>	.	.	.	.	.	.	+	.
<i>Pogonia japonica</i>	.	.	.	.	.	.	+	.
<i>Calamagrostis epigeios</i>	.	.	.	.	.	.	+	.
<i>Oryza sativa</i>	.	.	.	.	.	.	.	+
<i>Sagittaria aginashi</i>	.	.	.	.	.	.	.	+

Locality: Kokeyachi-Moor in Pref. Aomori (Tsugaru-Peninsula)
 Relevé by R. et K. F. (Sept. 22, 1974)

Table 4. *Eriocaulum echinulati*

Running number of table:	1	2	3	4
Number of relevé (M-):	58	55	56	57
Elevation (m):	54	54	54	54
Size of relevé (m ²):	6	8	8	4
Height of vegetation (cm):	60	70	60	40
Cover degree of vegetation (%):	80	85	80	80
Total number of taxa:	13	13	15	16
<u>Character- and differential taxa of the association:</u>				
<i>Eriocaulum echinulatum</i> var. <i>seticuspe</i>	1.2	1.2	.	+2
<i>Machaerina nipponensis</i>	4.4	4.3	3.3	2.2
<i>Ischaemum crassipes</i>	.	.	1.2	2.3
<i>Drosera indica</i>	.	.	1.2	.
<i>Rhynchospora rubra</i>	.	.	.	+2
<u>Character- and differential taxa of the alliance:</u>				
<i>Rhynchospora chinense</i>	3.3	3.3	3.3	3.3
<i>Utricularia yakushimensis</i>	+2	1.2	2.2	1.2
<i>Dimeria ornithopoda</i> var. <i>tenera</i>	2.2	.	1.2	2.2
<i>Utricularia bifida</i>	+	.	.	.
<i>Habenaria radiata</i>	.	+	+	+
<u>Companions:</u>				
<i>Aster rugulosus</i>	1.2	1.2	+2	1.2
<i>Sanguisorba officinalis</i>	+	+	+	+
<i>Phragmites australis</i>	1.1	1.2	1.1	+
<i>Viola verecunda</i>	+	1.2	+	+
<i>Hosta</i> sp.	+	+2	+	+
<i>Ixeris dentata</i>	+	.	+	+
<i>Hypericum oliganthum</i>	+	.	.	.
<i>Drosera rotundifolia</i>	.	+	+	.
<i>Sphagnum</i> sp.	.	+	.	.
<i>Gramineae</i> sp.	.	+2	.	.
<i>Fimbristylis subbispicata</i>	.	.	+	.
<i>Gentiana scabra</i> var. <i>buergeri</i>	.	.	.	+2
<i>Haloragis micrantha</i>	.	.	.	+

Locality: Kawaminamicho of Jito-gun in Pref. Miyazaki,
 Relevé by R.M., K.F., K.K. & M.K. (Aug. 18, 1978)

Table 5. *Eriocaulum hananoegoensis*

Running number of table:	1	2	3	4	5	6	7
Date of relevé (1977):	8	8	8	8	8	8	8
	2	4	2	2	2	4	2
Elevation (m):	1635	1615	1635	1635	1635	1630	1635
Size of relevé (m ²):	1	1	1	2	1	1	1
Height of vegetation (cm):	3	4	5	4	3	5	5
Cover degree of vegetation (%):	90	40	40	70	60	80	70
Cover degree of moss layer (%):	-	15	70	30	-	20	80
Total number of species:	8	8	10	14	15	14	10
<u>Character- and differential taxa of the association:</u>							
<i>Eriocaulum hananoegoense</i>	+2	1.2	1.2	+	.	1.2	+2
<i>Hypericum laxum</i>	1.2	+2	+2	+	1.2	+2	+
<i>Eleocharis congesta</i>	4.5	.	.	2.2	1.2	.	+2
<i>Juncus monticola</i>	+	1.2	2.3	2.2	1.2	3.3	2.2
<i>Viola verecunda</i> var. <i>yakusimana</i>	+	.	2.3	1.2	.	+2	3.3
<u>Character taxa of the alliance:</u>							
<i>Dimeria ornithopoda</i> var. <i>tenera</i>	4.4	2.3	2.2	3.3	3.3	1.2	2.2
<i>Rhynchospora fujiiana</i>	+	+	.	3.3	2.2	1.2	.
<i>Utricularia yakusimensis</i>	.	.	.	1.2	1.2	.	.
<i>Rhynchospora faberi</i>	.	2.2	.	.	.	.	.
<u>Other taxa:</u>							
<i>Agrostis clavata</i>	1.2	.	+	+	+2	1.2	+2
<i>Drosera rotundifolia</i>	.	2.2	+	+	+2	.	.
<i>Parnassia palustris</i>	.	.	.	+	+2	+	.
<i>Zoysia japonica</i>	.	.	+	.	.	.	+
<i>Deschampsia flexuosa</i>	.	.	.	+	+	.	.
<i>Carex omiana</i> var. <i>yakushimana</i>	.	.	+	.	.	.	.
<i>Eleocharis congesta</i> var. <i>thermalis</i>	.	+2	.	.	.	2.3	.
<i>Hypericum pseudopetiolatum</i> var. <i>yakusimense</i>	.	.	.	.	.	2.3	.
<i>Ixeris dentata</i>	.	.	.	.	+	.	.
<i>Ranunculus yakushimensis</i>	.	.	.	.	.	.	.
<i>Sphagnum papillosum</i>	.	.	.	.	+	2.2	3.3
<i>Campylopus yakusimaensis</i>	.	.	4.4	3.3	.	1.2	4.4
<i>Campylopus japonicus</i>	.	.	.	+	.	.	.
<i>Polytrichum commune</i>	.	.	.	.	2.2	.	.
<i>Jungermannia cyclops</i>	.	.	.	.	+	.	.
<i>Alobiellopsis parvifolia</i>	.	.	.	.	+	.	.
<i>Campylopus</i> sp.	.	.	.	.	+	.	.
<i>Pogonatum inflexum</i>	.	.	.	.	.	+2	.
<i>Dicranella palustris</i>	.	.	.	.	.	+	.

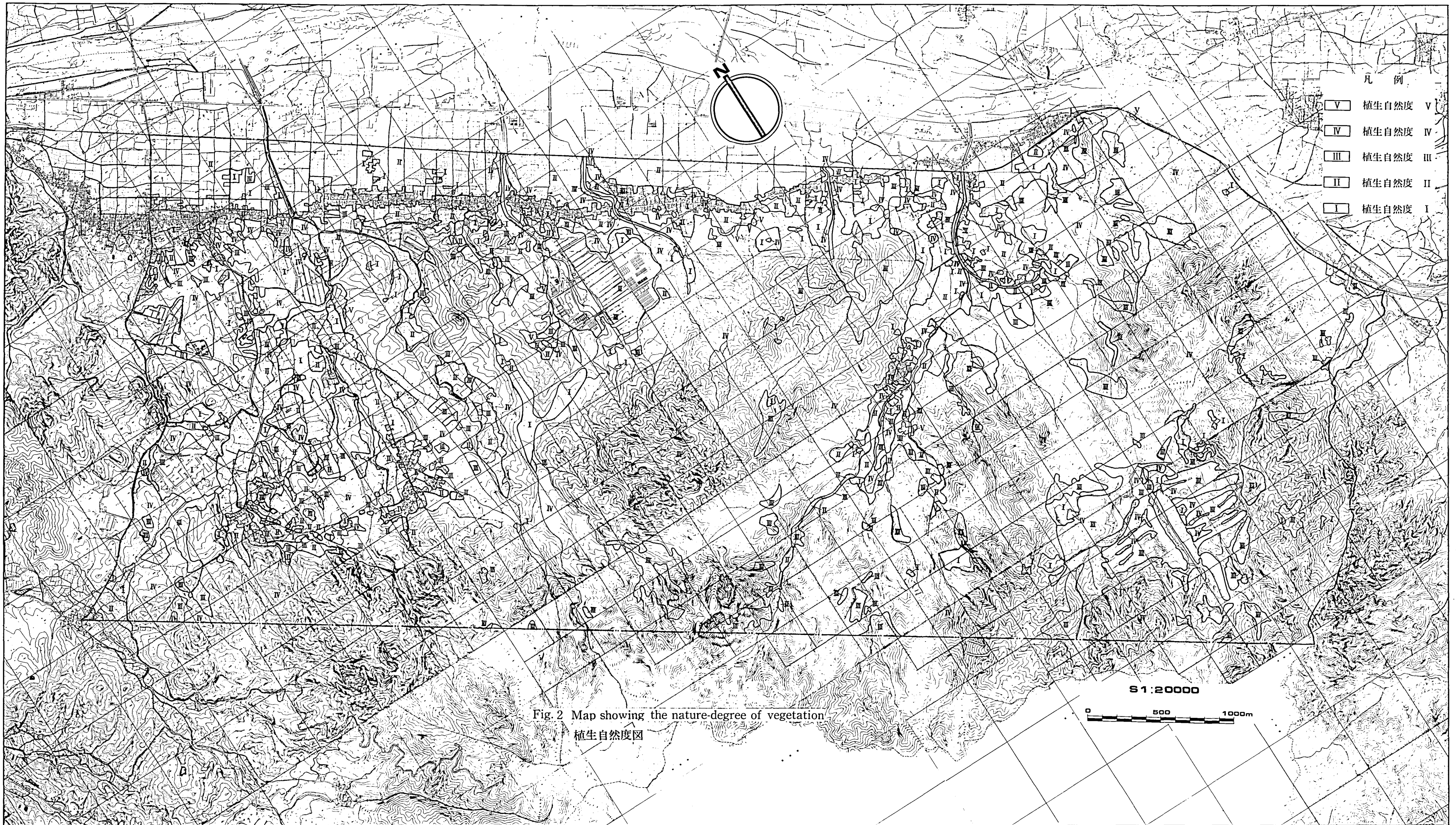
Locality: Insel-Yakushima 1,2,4-7: Hananoego-Moor. 3: Yodogoya
 Surveyed by: 1, 4, 5, 7-9 by R.M., K.F., M.K., & K.G. 2, 3, 6, by S.O., Y.N., L.M. & K.T.

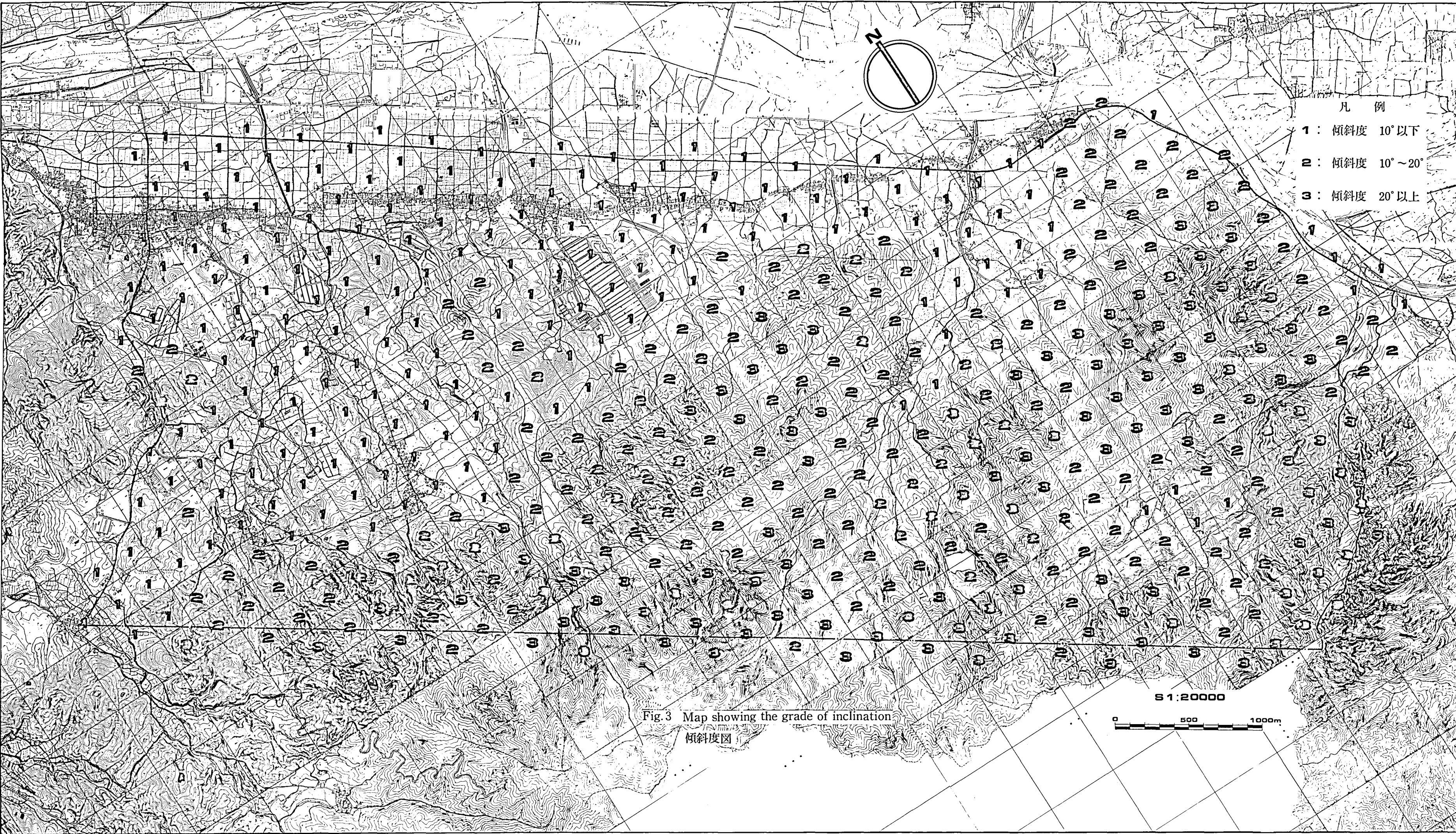
Table 2. The moor vegetation of the southern lowland of Okayama Pref. S.W. Japan

community group subgroup	1																									2																									3																									Geology G:granite R:rhyolite Q:quartz-porphry
	(1)												(2)													(1)												(2)																																						
	a						b						a						b							a							b						c																																					
Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60																
Differential species																																																																												
Rhynchospora brownii	2.3	2.3	2.3	3.4																																																				Toranohanahige																				
Rhynchospora faberi																																																																												
Rhynchospora fujiana																																																																												
Rhynchospora rubra																																																																												
Drosera spathulata	1.2																																																																											
Schoenus apogon	2.3																																																																											
Scleria rugosa var. glabrescens																																																																												
Drosera rotundifolia																																																																												
Utricularia racemosa																																																																												
Eriocaulon shikokianum																																																																												
Utricularia bifida																																																																												
Habenaria radiata																																																																												
Juncus papillosus																																																																												
Eleocharis wichuriae																																																																												
Dimeria ornithopoda var. tenera	1.2	1.2	2.3	2.2	2.3	+.2																																																				Karimatagaya																		
Ixeris dentata																																																																												
Cirsium sieboldii																																																																												
Juncus effusus var. decipiens	1.1																																																																											
Scirpus wichuriae	1.1																																																																											
Scirpus fuirenooides																																																																												
Companions																																																																												
Haloragis micrantha	1.2	+	1.1	+	1.1	2.2	1.3	+	2.2	+																																																				Arintogusa														
Rhynchospora chinensis	1.1	1.1	1.1																																																				Inunohanahige																					
Isachne globosa	1.1	2.2																																																				Chigozasa																						
Ischaemum aristatum var. glaucum	1.2	1.1																																																				Kanonchashi																						
Arundinella hirta																																																																												
Hololeion krameri																																																																												
Pinus densiflora(seedling)																																																																												
Miscanthus sinensis	1.1	1.1																																																				Todashiba																						
Fimbristylis subbispicata																																																																												
Rosa wichuriana	1.1	1.1	1.1																																																				Suiran																					
Eupatorium lindleyanum																																																																												
Pinus densiflora																																																																												
Carex thunbergii																																																																												
Moliniopsis japonica																																																																												
Eriocaulon decemflorum var. nipponicum																																																																												
Ilex crenata	1.1																																																																											
Cyperus haspan																																																																												
Scleria levis																																																																												
Pogonia japonica																																																																												
Lycopodium maackianum																																																																												
Gentiana scabra var. buergeri																																																																												
Andropogon virginicus																																																																												
Dicranopteris dichotoma	1.1	1.1	3.3																																																				Akamatsu(Mebae)																					
Scirpus juncoides																																																																												
Liriope minor																																																																												
Lycopodium cernuum	2.3																																																																											
Sacciolepis indica																																																																												
Fimbristylis complanata																																																																												
Smilax china																																																																												
Heloniopsis orientalis																																																																												
Salomonina oblongifolia																																																																												
Hypnum plumaeforme																																																																												
Arundinaria pygmaea																																																																												
Cladium chinense																																																																												
Juniperus rigida																																																																												
Ilex crenata (seedling)																																																																												

No.1 Juncus wallichianus (Marikōgaizekishō) 1.1, No.2 Carex sp. +, No.4 Wikstroemia trichotoma (Kiganpi) 1.2, Populus sieboldii (Yamanarashi) +, Eurya japonica (Hisakaki) 2.2, Solidago virga-aurea var. asiatica (Akinokirinsō) +, Rhododendron reticulatum (Kobanmitsubatsutsuji) +, No.18 Lysimachia fortunei (Numatorano) +.2, No.25 Scirpus triangulatus (Kangarei) +, No.36 Eriocaulon atrum (Kuroinunohige) +.2, No.60 Osmunda japonica (Zenmai) +.

1. Rhynchospora brownii community 2. Rhynchospora faberi community (1) Rhynchospora rubra group a. Drosera spathulata subgroup, b. Typical subgroup, (2) Eriocaulon shikokianum group (a. Typical subgroup, b. Juncus papillosus subgroup) 3. Rhynchospora fujiana community
 (1) Dimeria ornithopoda var. tenera group (a. Drosera spathulata subgroup, b. Typical subgroup, c. Eriocaulon shikokianum subgroup, d. Juncus papillosus subgroup) (2) Cirsium sieboldii group (a. Utricularia racemosa subgroup, b. Juncus papillosus subgroup, c. Typical subgroup)





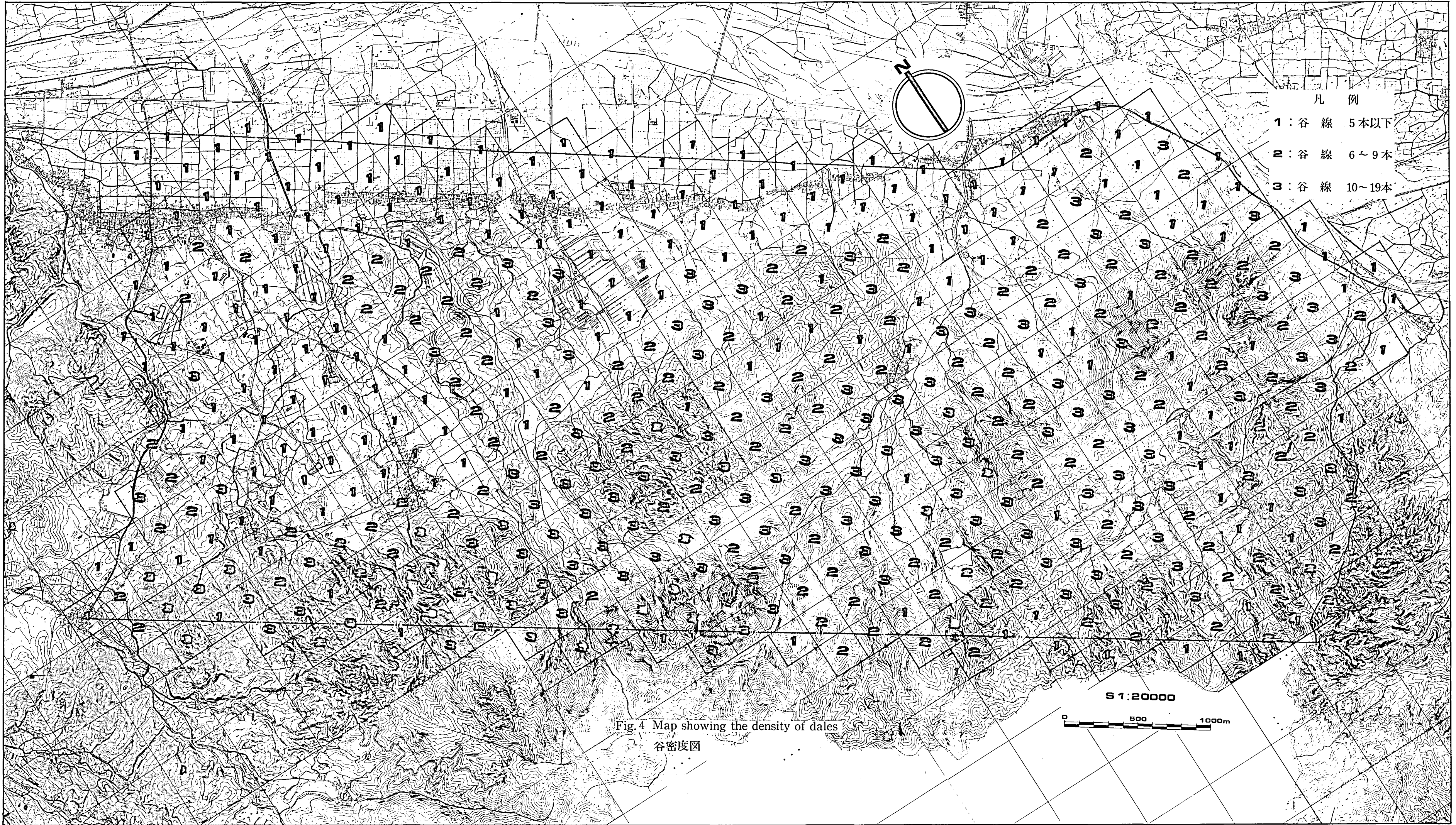
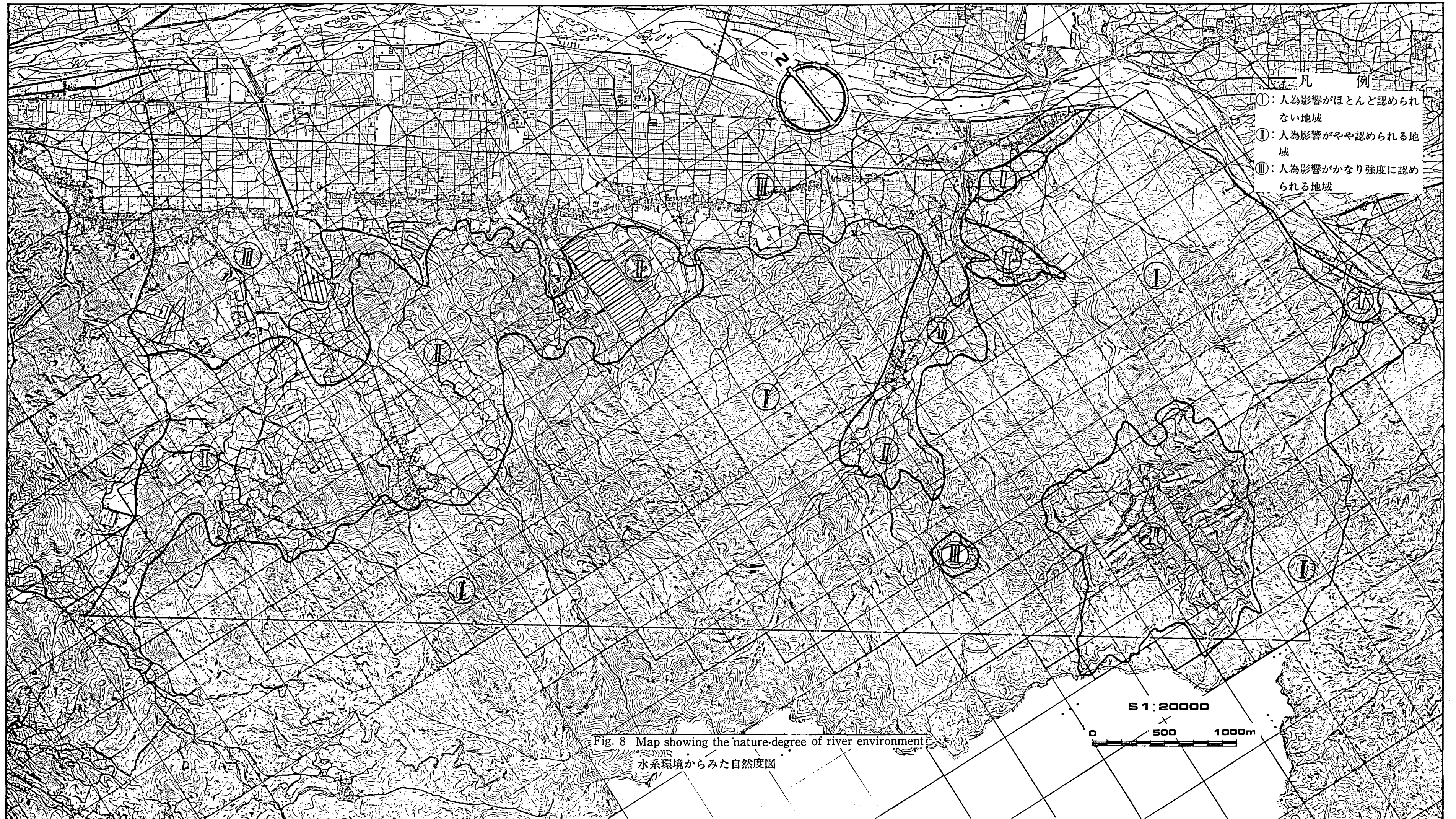


Fig. 4 Map showing the density of dales
谷密度図



Fig. 5 Map showing visual analysis
景觀解析図



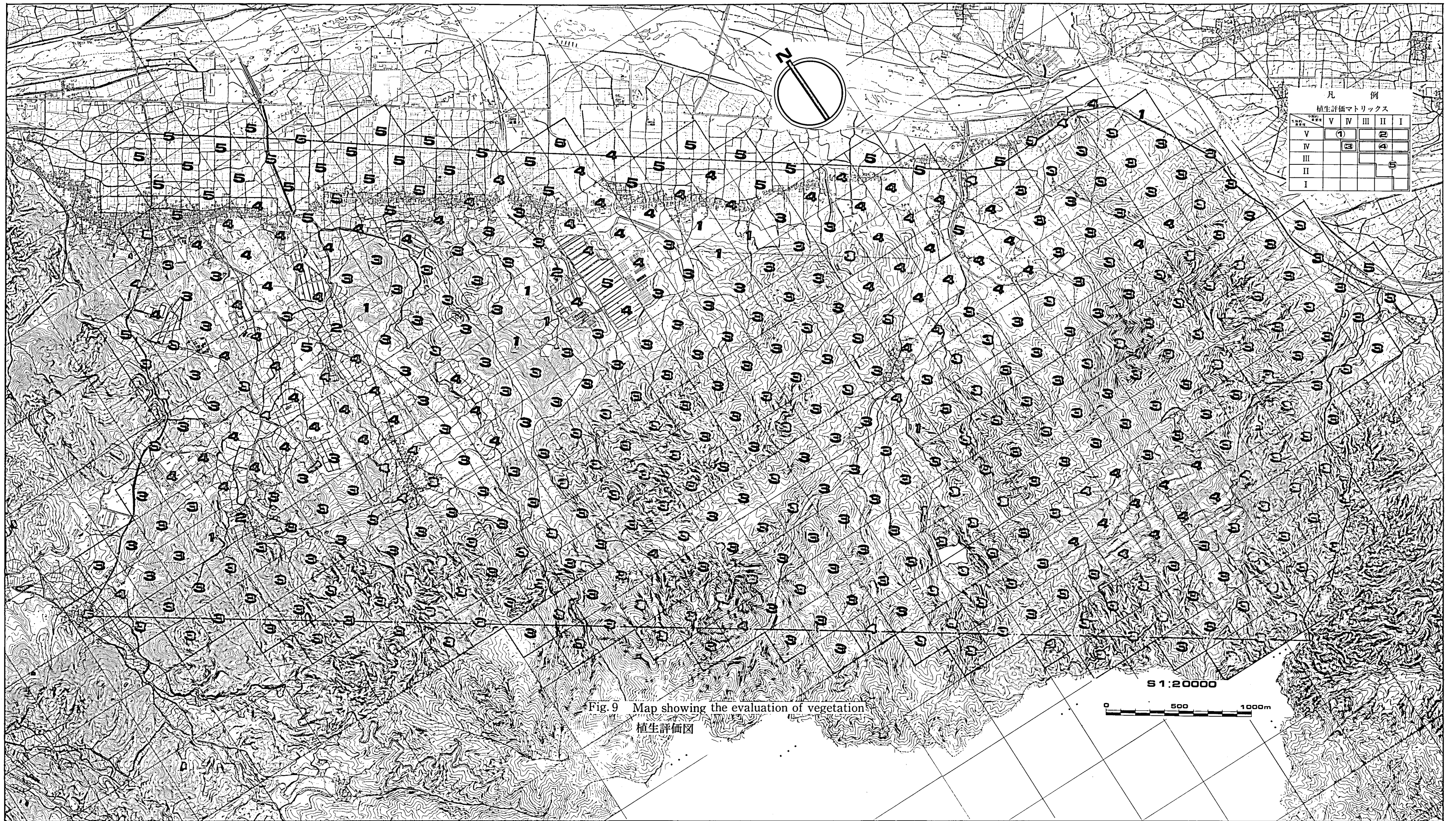
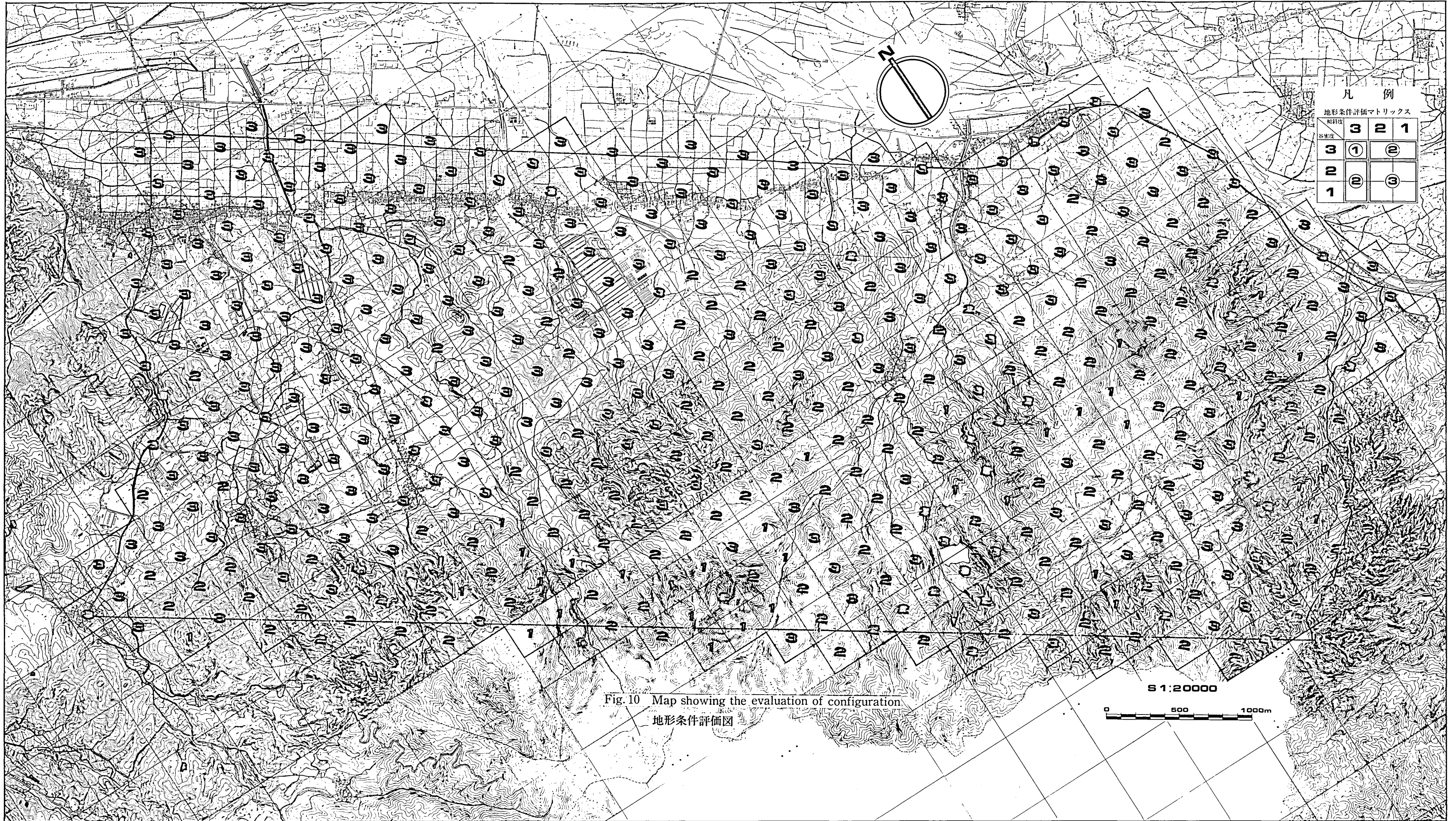


Fig. 9 Map showing the evaluation of vegetation
植生評価図



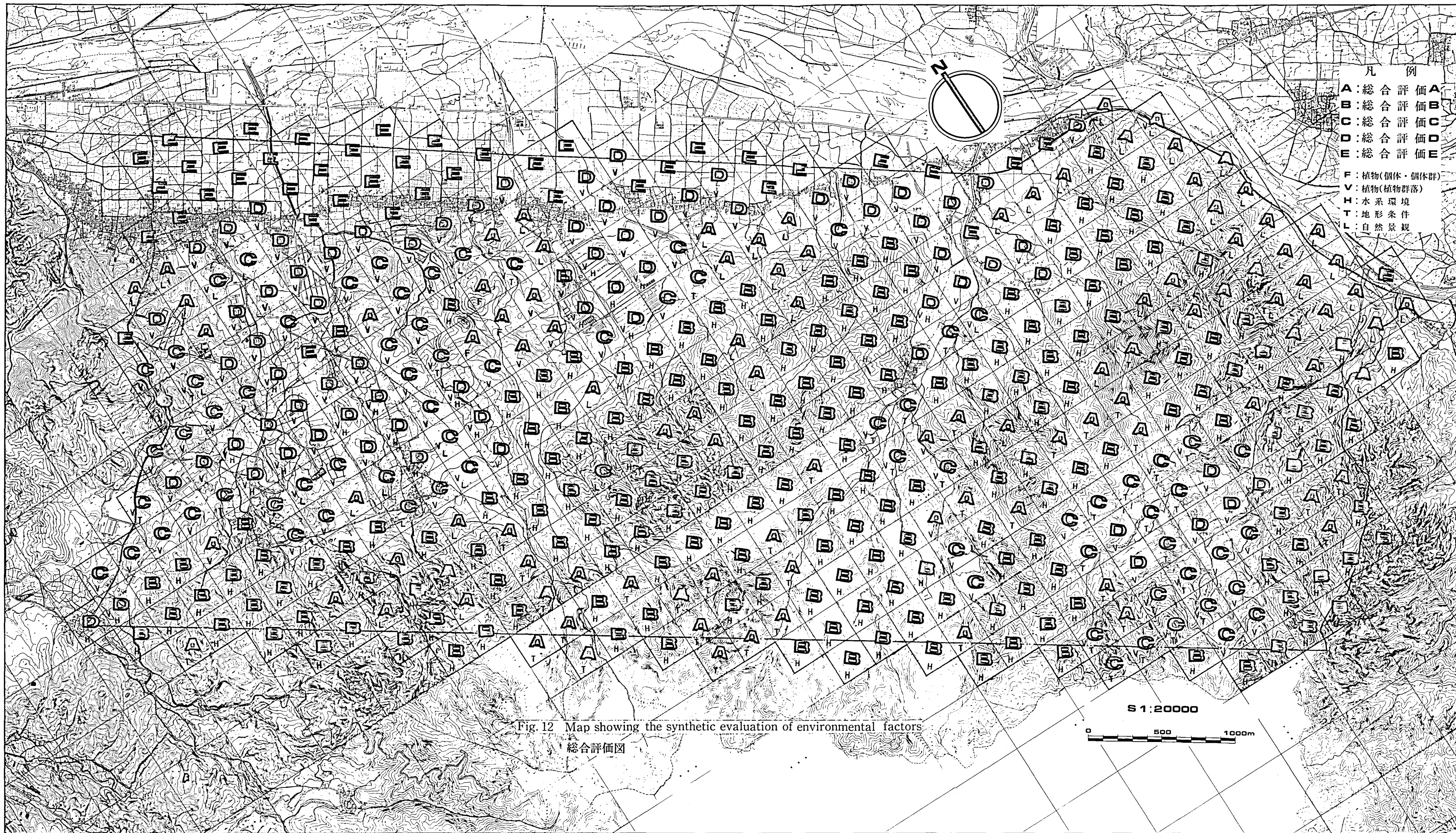


表2 森林植物群落区分表
Tab. 2 Waldgesellschaften

1: ミズスギ-リュウキュウマツ群落
Lycopodium cernuum-*Pinus luchuensis*-Ges.
2: ツルコナラ-リュウキュウマツ群落
Rhodomyrtus tomentosa-*Pinus luchuensis*-Ges.
3: リュウキュウマツ-オオスギ群落
Psychotria-Castanopsis sieboldii Miyawaki et al. 1971
4: ツルコナラ-リュウキュウマツ群落
Mussaenda parviflora-*Pinus luchuensis*-Ges.
a: 樹層下位階 typische Unterges.
b: ヒメスミレ下位階 *Daphniphyllum triflorum* Unterges.
c: リュウキュウマツ-オオスギ群落
Psychotria-Castanopsis sieboldii Miyawaki et al. 1971
d: ツルコナラ-リュウキュウマツ群落
Mussaenda parviflora-*Pinus luchuensis*-Ges.
a: 樹層下位階 typische Unterges.
b: ノボタン下位階 *Melastoma candidum* Unterges.

Vegetationseinheiten		植生単位		1		2		3		4	
Nr. d. Aufnahme	調査番号	1	2	3	4	5	6	7	8	9	10
Datum d. Aufnahme (Jahr)	調査年月	78 78 78 78 78 78	78 78 78 78 78 78	78 78 78 78 78 78	78 78 78 78 78 78	78 78 78 78 78 78	78 78 78 78 78 78	78 78 78 78 78 78	78 78 78 78 78 78	78 78 78 78 78 78	78 78 78 78 78 78
Exposition	方位	E SE E N NW	S SE W	S NESENE - NW - W SW	S SESENE - NW - W SW	SESESENE S WSESWSE	SESESENE S WSESWSE	SESESENE S WSESWSE	SESESENE S WSESWSE	SESESENE S WSESWSE	SESESENE S WSESWSE
Neigung (°)	傾斜(°)	5 13 25 25 5	0 30 30 34 0	0 5 25 25 0 35 0 0 24 13 0	0 5 25 25 0 35 0 0 24 13 0	14 31 14 26 29 42 14 27 34 39	14 31 14 26 29 42 14 27 34 39	14 31 14 26 29 42 14 27 34 39	14 31 14 26 29 42 14 27 34 39	14 31 14 26 29 42 14 27 34 39	14 31 14 26 29 42 14 27 34 39
Größe d. Probestfläche (m²)	調査面積 (m²)	1001010101010100	101010101010100	10101010101010100	10101010101010100	1010101010101010100	1010101010101010100	1010101010101010100	1010101010101010100	1010101010101010100	1010101010101010100
Höhe d. Baumschicht-1 (m)	高木層 (高)の樹高	-	-	-	-	-	-	-	-	-	-
Höhe d. Baumschicht-2 (m)	亜高木層 (高)の樹高	-	-	-	-	-	-	-	-	-	-
Höhe d. Strauchschicht-1 (m)	低木層 (高)の樹高	-	-	-	-	-	-	-	-	-	-
Höhe d. Strauchschicht-2 (m)	低木層 (高)の樹高	-	-	-	-	-	-	-	-	-	-
Höhe d. Krautschicht (m)	草本層 (高)の樹高	0.5 0.5 0.5 0.5 0.5 0.5	0.5 1 1 0.5	1.0 3.0 5.0 5.0 5.0 5.0	1.0 3.0 5.0 5.0 5.0 5.0	0.5 0.5 0.5 0.5 0.5 0.5	0.5 0.5 0.5 0.5 0.5 0.5	0.5 0.5 0.5 0.5 0.5 0.5	0.5 0.5 0.5 0.5 0.5 0.5	0.5 0.5 0.5 0.5 0.5 0.5	0.5 0.5 0.5 0.5 0.5 0.5
Deckung d. Baumschicht-1 (%)	高木層 (%)の被り	70 50 20 80 40	70 80 80 100 80	95 5 30 40 10 40 20 40 20 30 20	95 5 30 40 10 40 20 40 20 30 20	5 5 5 5 5 5 5 5 5 5 5	5 5 5 5 5 5 5 5 5 5 5	5 5 5 5 5 5 5 5 5 5 5	5 5 5 5 5 5 5 5 5 5 5	5 5 5 5 5 5 5 5 5 5 5	5 5 5 5 5 5 5 5 5 5 5
Deckung d. Baumschicht-2 (%)	亜高木層 (%)の被り	-	-	-	-	-	-	-	-	-	-
Deckung d. Strauchschicht-1 (%)	低木層 (%)の被り	-	-	-	-	-	-	-	-	-	-
Deckung d. Strauchschicht-2 (%)	低木層 (%)の被り	-	-	-	-	-	-	-	-	-	-
Deckung d. Krautschicht (%)	草本層 (%)の被り	25 10 8 12 10 15	21 13 26 16 18	25 27 26 33 28 25 24 25 29 38 23 26	25 27 26 33 28 25 24 25 29 38 23 26	32 27 25 31 32 30 33 32 36 37	32 27 25 31 32 30 33 32 36 37	32 27 25 31 32 30 33 32 36 37	32 27 25 31 32 30 33 32 36 37	32 27 25 31 32 30 33 32 36 37	32 27 25 31 32 30 33 32 36 37
Artenzahl	出現種数	28 10 8 12 10 15	21 13 26 16 18	25 27 26 33 28 25 24 25 29 38 23 26	25 27 26 33 28 25 24 25 29 38 23 26	32 27 25 31 32 30 33 32 36 37	32 27 25 31 32 30 33 32 36 37	32 27 25 31 32 30 33 32 36 37	32 27 25 31 32 30 33 32 36 37	32 27 25 31 32 30 33 32 36 37	32 27 25 31 32 30 33 32 36 37
1. ミズスギ-リュウキュウマツ群落区分											
Trennarten d. <i>Lycopodium cernuum</i> - <i>Pinus luchuensis</i> -Ges.											
<i>Lycopodium cernuum</i>	ミズスギ	K	+	+	+	+	+	+	+	+	+
<i>Sphenomeris chinensis</i>	オオスギ	K	+	+	+	+	+	+	+	+	+
<i>Pogonatherum crinitum</i>	イタチガサ	K	+	+	+	+	+	+	+	+	+
<i>Erigeron sumatrensis</i>	オオアレチノギク	K	+	+	+	+	+	+	+	+	+
<i>Erechtites hieracifolia</i> var. <i>onalioides</i>	ウツノクサ	K	+	+	+	+	+	+	+	+	+
2. ツルコナラ-リュウキュウマツ群落区分											
Trennarten d. <i>Rhodomyrtus tomentosa</i> - <i>Pinus luchuensis</i> -Ges.											
<i>Burya japonica</i>	ヒメコナラ	B	+	+	+	+	+	+	+	+	+
<i>Glochidion ovatum</i>	カンコノキ	S	+	+	+	+	+	+	+	+	+
<i>Rhodomyrtus tomentosa</i>	ツルコナラ	S	+	+	+	+	+	+	+	+	+
3. リュウキュウマツ林の構成種											
Arten d. <i>Pinus luchuensis</i> -Wälder											
<i>Pinus luchuensis</i>	リュウキュウマツ	B ₁	+	+	+	+	+	+	+	+	+
<i>Miscanthus sinensis</i>	ススキ	S	+	+	+	+	+	+	+	+	+
<i>Dicranopteris dichotoma</i>	コシロノギ	S	+	+	+	+	+	+	+	+	+
<i>Melastoma candidum</i>	ノボタン	S	+	+	+	+	+	+	+	+	+
<i>Pteridium aquilinum</i> var. <i>latiusculum</i>	ウラボシ	S	+	+	+	+	+	+	+	+	+
4. スダジイ林の構成種											
Arten d. <i>Castanopsis sieboldii</i> -Wälder											
<i>Daphniphyllum triflorum</i>	ヒメスミレ	B ₁	+	+	+	+	+	+	+	+	+
<i>Syzygium buxifolium</i>	フタバ	B ₁	+	+	+	+	+	+	+	+	+
<i>Diospyros morrisiana</i>	トキワザキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Antidesma japonicum</i>	ヤマモミ	B ₁	+	+	+	+	+	+	+	+	+
<i>Myrsine seguinii</i>	タイミンナバナ	B ₁	+	+	+	+	+	+	+	+	+
<i>Camellia sasanqua</i>	ヤマザシ	B ₁	+	+	+	+	+	+	+	+	+
<i>Myrica rubra</i>	ヤブミズキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Smilax nervo-marginata</i>	ヤマハハコ	B ₁	+	+	+	+	+	+	+	+	+
<i>Lindaea chinenis</i>	メダカホトケ	B ₁	+	+	+	+	+	+	+	+	+
5. ツルコナラ-リュウキュウマツ群落区分											
Trennarten d. <i>Psychotria-Castanopsis sieboldii</i>											
<i>Castanopsis sieboldii</i>	スダジイ	B ₁	+	+	+	+	+	+	+	+	+
<i>Distylium racemosum</i>	イヌノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Randia canthioides</i>	ツルコナラ	B ₁	+	+	+	+	+	+	+	+	+
<i>Lasiacanthus cyanocarpus</i>	タイワンクサ	B ₁	+	+	+	+	+	+	+	+	+
<i>Taraxacum yokushinense</i>	ゴキウソウ	B ₁	+	+	+	+	+	+	+	+	+
<i>Microtropis japonica</i>	セキセイソウ	B ₁	+	+	+	+	+	+	+	+	+
<i>Symplocos stellaris</i>	ヤマハハコ	B ₁	+	+	+	+	+	+	+	+	+
<i>Ardisia crenata</i>	マンリョウ	B ₁	+	+	+	+	+	+	+	+	+
<i>Dendropanax trifidum</i>	カクレミノ	B ₁	+	+	+	+	+	+	+	+	+
6. ツルコナラ-リュウキュウマツ群落区分											
Trennarten d. <i>Mussaenda parviflora</i> - <i>Pinus luchuensis</i> -Ges.											
<i>Mussaenda parviflora</i>	ツルコナラ	B ₁	+	+	+	+	+	+	+	+	+
<i>Stephania japonica</i> var. <i>australis</i>	ツルコナラ	B ₁	+	+	+	+	+	+	+	+	+
<i>Glochidion zeylanicum</i>	カンコノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Elaeagnus glabra</i>	フナギ	B ₁	+	+	+	+	+	+	+	+	+
<i>Ficus erecta</i>	イヌビロ	B ₁	+	+	+	+	+	+	+	+	+
<i>Lygodium japonicum</i>	ウラボシ	B ₁	+	+	+	+	+	+	+	+	+
<i>Mallotus japonicus</i>	アカハコ	B ₁	+	+	+	+	+	+	+	+	+
<i>Wendlandia formosana</i>	アカイゴキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Elaeocarpus sylvestris</i>	ホルトノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Scleria terrestris</i>	オオシロ	S	+	+	+	+	+	+	+	+	+
7. ツルコナラ-リュウキュウマツ群落区分											
Trennarten d. <i>Psychotria-Castanopsis sieboldii</i>											
<i>Elaeocarpus japonicus</i>	コバンモク	B ₁	+	+	+	+	+	+	+	+	+
<i>Ilex maximoviciana</i> var. <i>mutchagara</i>	ムツギ	B ₁	+	+	+	+	+	+	+	+	+
<i>Ardisia quinquegona</i>	シシアナ	B ₁	+	+	+	+	+	+	+	+	+
<i>Schefflera octophylla</i>	フキノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Psychotria rubra</i>	リュウキュウマツ	B ₁	+	+	+	+	+	+	+	+	+
8. ツルコナラ-リュウキュウマツ群落区分											
Trennarten d. <i>Rhodomyrtus tomentosa</i> - <i>Pinus luchuensis</i> -Ges. u. <i>Psychotria-Castanopsis sieboldii</i>											
<i>Vaccinium wrightii</i>	イチゴ	B ₁	+	+	+	+	+	+	+	+	+
<i>Cinnamomum doederleinii</i>	シロハハコ	B ₁	+	+	+	+	+	+	+	+	+
<i>Symplocos lucida</i>	オウゴン	B ₁	+	+	+	+	+	+	+	+	+
<i>Gardenia jasminoides</i> f. <i>grandiflora</i>	クサナシ	B ₁	+	+	+	+	+	+	+	+	+
<i>Viburnum japonicum</i>	ハナノキ	B ₁	+	+	+	+	+	+	+	+	+
9. ツルコナラ-リュウキュウマツ群落区分											
Arten d. <i>Camellia japonica</i>											
<i>Psychotria serpens</i>	シロハハコ	B ₁	+	+	+	+	+	+	+	+	+
<i>Raphiolepis indica</i> var. <i>insularis</i>	オオハハコ	B ₁	+	+	+	+	+	+	+	+	+
<i>Smilax sebana</i>	ハナノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Schima wallichii</i> ssp. <i>liukuensis</i>	イシ	B ₁	+	+	+	+	+	+	+	+	+
<i>Machilus thunbergii</i>	タバコ	B ₁	+	+	+	+	+	+	+	+	+
10. 雑草											
<i>Blechnum orientale</i>	ヒメウラボシ	S	+	+	+	+	+	+	+	+	+
<i>Callicarpa japonica</i> var. <i>luxurians</i>	オオハハコ	S	+	+	+	+	+	+	+	+	+
<i>Pleoblastus linearis</i>	リュウキュウマツ	S	+	+	+	+	+	+	+	+	+
<i>Euscaphis japonica</i>	ツルコナラ	B ₁	+	+	+	+	+	+	+	+	+
<i>Syzygium jambos</i>	フタバ	B ₁	+	+	+	+	+	+	+	+	+
<i>Neolitsea sericea</i>	シロハハコ	S	+	+	+	+	+	+	+	+	+
<i>Morinda umbellata</i>	ハナノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Ananas comosus</i>	パイナップル	B ₁	+	+	+	+	+	+	+	+	+
<i>Rhus succedanea</i>	ハナノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Symplocos microcalyx</i>	ハナノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Ardisia sieboldii</i>	マンリョウ	B ₁	+	+	+	+	+	+	+	+	+
<i>Meliosma rigida</i>	ハナノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Stauntonia hexaphylla</i>	ムベ	B ₁	+	+	+	+	+	+	+	+	+
<i>Aralia elata</i>	タラシ	B ₁	+	+	+	+	+	+	+	+	+
<i>Cinnamomum japonicum</i>	セッコク	B ₁	+	+	+	+	+	+	+	+	+
<i>Tylophora japonica</i>	トキワザキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Mucuna irukanda</i>	イルカ	B ₁	+	+	+	+	+	+	+	+	+
<i>Laphathrum gracile</i>	ハナノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Lindaea orbiculata</i> var. <i>commixta</i>	メダカホトケ	B ₁	+	+	+	+	+	+	+	+	+
<i>Ligustrum liukuense</i>	ハナノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Clematis meyeniana</i>	ハナノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Ilex liukuensis</i>	ハナノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Pittosporum tobira</i>	ハナノキ	B ₁	+	+	+	+	+	+	+	+	+
<i>Ilex goshiensis</i>	ハナノキ	B ₁	+	+	+	+	+	+	+	+	+

表3 草本植生群落区分表
Tab.3 Krautgesellschaften

- 1: チゴザサーハイキビ群落
Isachne globosa-*Panicum repens*-Ges.
- 2: ヒデリコーハイキビ群落
Fimbristylis littoralis-*Panicum repens*-Ges.
- 3: メヒシバーススキ群落
Digitaria adscendens-*Miscanthus sinensis*-Ges.
- 4: カタバミーオニタビラコ群落
Oxalis corniculata-*Youngia japonica*-Ges.

Vegetationseinheiten	植生単位	←1→	←2→	←3→	←4→
Nr. d. Aufnahme	調査番号	1 2 3 4 5 6	7 8 9 10 11	12 13 14 15 16	17 18 19 20 21 22 23 24 25
Datum (Monat) d. Aufnahme ('78)	調査年月 ('78)	7 7 7 7 7 7	7 7 7 7 7	5 7 7 7 8	5 5 5 5 5 5 5 7
Exposition	方位	- - - - -	- - - - -	SWSESW - N	- - - - - SWW S
Neigung (°)	傾斜 (°)	0 0 0 0 0 0	0 0 0 0 0	15 7 15 0 6	0 0 0 0 0 0 5 18 5
Größe d. Probefläche (m ²)	調査面積 (m ²)	100100100100100	100100100100100	100100100100100	100100100100100100100100100
Höhe d. Krautschicht-1 (m)	草本層1... (高さ) (m) Deckung d. Krautschicht-1 (%) 階 ... (植被率) (%)	2 2 2 2 1.5 4	1.5 1.5 3 2 2	1.5 - 1.5 1.5 -	2 1.5 2 1.5 2 - 1.5 2 -
Höhe d. Krautschicht-2 (m)		0.5 1 1 1 0.8 1	0.5 0.5 0.5 1 1	0.5 0.3 0.5 0.8 0.5	0.5 0.3 0.3 0.3 0.5 0.5 0.5 0.5 0.3
Deckung d. Krautschicht-2 (%)	層 草本層2... (高さ) (m) ... (植被率) (%)	20 95 30 90 100100	50 30 70 80 20	90 30 6 0 8 0 70	30 10 30 10 20 50 30 40 50
Artenzahl	出現種数	4 4 3 7 6 6	30 20 30 21 16	15 10 11 14 8	9 8 11 17 9 14 13 15 18
1. チゴザサーハイキビ群落区分種					
Trennarten d. <i>Isachne globosa</i> - <i>Panicum repens</i> -Ges.					
<i>Isachne globosa</i>	チゴザサ	K ₂	+2 1-2+2 3-4 3-4 3-4	. . . . .	. . . . .
<i>Typha domingensis</i>	ヒメガマ	K ₁ , K ₂	3-4 4-4 3-3 2-3 ±	1-2 . . . . .	. . . . .
2. ヒデリコーハイキビ群落区分種					
Trennarten d. <i>Fimbristylis littoralis</i> - <i>Panicum repens</i> -Ges.					
<i>Sesbania cannabina</i>	ツノクサネム	K ₁ , K ₂	. . . . .	+ ± . +2 .	. . . . .
<i>Cynodon dactylon</i>	ギョウギシバ	K ₂	. . . . .	+ + . + .	. . . . .
<i>Cyperus polystachyos</i>	イガガヤツリ	K ₂	. . . . .	+ . 1-2 + .	. . . . .
<i>Fimbristylis littoralis</i>	ヒデリコ	K ₂	. . . . .	+ . + . +2	. . . . .
<i>Fimbristylis cymosa</i> var. <i>spathacea</i>	シオカゼテンツキ	K ₂	. . . . .	+ . 1-2 + .	. . . . .
<i>Fimbristylis sieboldii</i> var. <i>anpinensis</i>	シマテンツキ	K ₂	. . . . .	. 1-2 +2 + .	. . . . .
3. チゴザサーハイキビ群落とヒデリコーハイキビ群落の共通種					
Art d. <i>Panicum repens</i> -Gesellschaften					
<i>Panicum repens</i>	ハイキビ	K ₁	. . . . .	1-2 +2 . + .	. . . . .
		K ₂	2-25-53-35-5 5-55-5	1-2 +2 . 4-4 +	. . . . . +2
4. メヒシバーススキ群落区分種					
Trennarten d. <i>Digitaria adscendens</i> - <i>Miscanthus sinensis</i> -Ges.					
<i>Miscanthus sinensis</i>	ススキ	K ₁	. . . . .	+ 1-1 + . .	1-2 + 1-2 1-1 .
		K ₂	. . . . .	+2+2 1-2 + .	. + 2-3 + +2
<i>Paspalum conjugatum</i>	オガサワラスズメノヒエ	K ₂	. . . . .	+ . 1-2 1-2 +	. + +2
<i>Paspalum dilatatum</i>	シマズメノヒエ	K ₂	. . . . .	+ + . + .	. + + . . . . .
5. カタバミーオニタビラコ群落区分種					
Trennarten d. <i>Oxalis corniculata</i> - <i>Youngia japonica</i> -Ges.					
<i>Oxalis corniculata</i>	カタバミ		. . . . .	. + . . . . .	. . . . . + 3-3 1-2 2-3 +2+2+2+2
<i>Youngia japonica</i>	オニタビラコ		. . . . .	. . . . .	. + + + 1-2+2+2+2+2
<i>Solanum nigrum</i>	イソホオズキ	K ₁	. . . . .	. . . . .	. . + . . . . .
		K ₂	. . . . .	. . . . .	. + . + . + +2 . +
<i>Blumea lacera</i> var. <i>blumei</i>	サケバコウゾリナ	K ₁ , K ₂	. . . . .	. . . . .	. ± . . . . .
<i>Cyperus rotundus</i>	ハマスゲ	K ₂	. . . . .	. . . . .	. + . + + . 1-2 +2 . .
6. メヒシバーススキ群落とカタバミーオニタビラコ群落の共通種					
Art d. <i>Miscanthus sinensis</i> -Ges. u. <i>Youngia japonica</i> -Ges.					
<i>Digitaria adscendens</i>	メヒシバ	K ₁	. . . . .	. . . . .	. . . . . 2-2
		K ₂	. . . . .	. . . . .	. 1-2 + 1-2 +2 . 1-2 + + + 2-3 +2+2+2
7. 随伴種					
Begleiter					
<i>Paspalum urvillei</i>	タチスズメノヒエ	K ₁	. . . . .	+2 3-4 +2 1-2 .	+2 +2 . .
		K ₂	. . . . .	+ 1-2 . + +	. + 1-1 . + + 2-2 +
<i>Aster subulatus</i>	ホウキギク	K ₁	. . . . .	. . . . .	. . . . . + . . . . .
		K ₂	. . . . .	+2 1-2 +2 +2 +	. . . . . +2 + . + +
<i>Saccharum officinarum</i>	サトウキビ	K ₁	. . . . .	. . . . . 1-2 4-4	2-2 3-3 4-4 3-4 4-4
		K ₂	. . . . .	. . . . .	1-2 +2 + + . 1-2
<i>Ananas comosus</i>	パイナップル	K ₂	. . . . .	. . . . .	4-4 2-2 2-3 4-4 4-4 3-4
<i>Ageratum houstonianum</i>	ムラサキカクアザミ	K ₂	. . . . .	. . . . . +	. + +2 . +2
<i>Polygonum chinense</i>	ツルソバ	K ₂	. . . . . +	. . . . .	. + . + . . . . .
<i>Melastoma candidum</i>	ノボタン	K ₂	. . . . .	. . +2 . .	. . + +2 + +
<i>Cyperus brevifolius</i>	アイダクグ	K ₂	. . . . .	. + . + + +	. . . . . 2-2 . .
<i>Erigeron sumatrensis</i>	オオアレチノギク	K ₂	. . . . .	. + . + . .	. . . . . + . . . . .
<i>Bidens pilosa</i>	コセンダングサ	K ₁	. . . . .	. . . . .	. . . . . +2
		K ₂	. . . . .	. + . . . .	. . . . . + +2 + . .
<i>Ageratum conyzoides</i>	カクアザミ	K ₂	. . . . .	. . + . . .	. . +2+2-3 1-2 . .
<i>Erechtites hieracifolia</i> var. <i>caicalioides</i>	ウシノタケダグサ	K ₂	. . . . .	. . . . .	. + . +2 + . . +2
<i>Brachiaria mutica</i>	バラグラス	K ₁	. . . . .	. . . . . +2 +
		K ₂	. . . . .	. +2 . . . .	. +2 +
<i>Imperata cylindrica</i> var. <i>major</i>	チガヤ	K ₂	. . . . .	2-2 . +2 . .	. . . . . 1-2
<i>Dicranopteris dichotoma</i>	コシダ	K ₂	. . . . .	. . . . .	. +2 . . + +
<i>Acalypha australis</i>	エノキグサ	K ₂	. . . . .	. + . . . .	. . . . . 1-2 1-2
<i>Sphaeropteris lepifera</i>	ヒカゲヘゴ	K ₂	. . . . .	. . . . .	. + + + + . . . . .
<i>Lygodium japonicum</i>	カニクサ	K ₂	. . . . .	. . . . .	. . . . . + . . . . .
<i>Eleusine indica</i>	オヒシバ	K ₂	. . . . .	. . . . .	. . . . . +2 . +2 +
<i>Amaranthus lividus</i>	イヌビユ	K ₂	. . . . .	. . . . .	. . . . . + . . . . +2 . 1-2 .
<i>Phragmites karka</i>	セイコノヨシ	K ₁	. . . . . + 3-3	. . . . .	. . . . . + . . . . .
		K ₂	. . . . .	. + . . . .	. . . . . + . . . . .
<i>Ischaemum aristatum</i>	タイワンカモノハシ	K ₂	. . . . . + +	. . . . . +	. . . . . 1-2
<i>Paspalum orbiculare</i>	スズメノコビエ	K ₁	. . . . .	. . . . .	. . . . . 3-4 +2 .
		K ₂	. . . . .	. . . . .	. . . . . 1-1
<i>Lespedeza cuneata</i>	メドハギ	K ₁	. . . . .	. + . + . .	. . . . . + . . . . .
		K ₂	. . . . .	. . . . .	. . . . . + . . . . .
<i>Ludwigia octovalvis</i> ssp. <i>sessiliflora</i>	キダチキンバイ	K ₂ +	. + +
<i>Scirpus mucronatus</i> ssp. <i>robustus</i>	カンガレイ	K ₂	. . . . .	. 1-2 +2 +
<i>Colocasia esculentum</i>	サトイモ	K ₂ + + +
<i>Polypogon fugax</i>	ヒエガイリ	K ₂	. . . . .	. + + . . . .	. . . . . + . . . . .
<i>Centella asiatica</i>	ツボクサ	K ₂	. . . . .	. + . + . . . .	. . . . . + . . . . .
<i>Sporobolus fertilis</i>	ネズミノオ	K ₂	. . . . .	. + . + . . . .	. . . . . + . . . . .
<i>Cyperus globosus</i>	アゼガヤツリ	K ₂	. . . . .	. . + . . . .	. . . . . + . . . . .
<i>Erigeron bonariensis</i>	アレチノギク	K ₂	. . . . .	. + . . . .	. . . . . + . . . . .
<i>Kummerowia striata</i>	ヤハズソウ	K ₂	. . . . .	. + . . . .	. . . . . + . . . . .
<i>Cyperus iria</i>	コゴメガヤツリ	K ₂	. . . . .	. . + . . . .	. . . . . + . . . . .
<i>Alternanthera sessilis</i>	ツルノゲイトウ	K ₂	. . . . .	. . . . . +2 +
<i>Ludwigia epilobioides</i>	チヨウジタデ	K ₂	. . . . .	. . . . . 1-2 +
<i>Hedyotis diffusa</i>	フタバムグラ	K ₂	. . . . .	. . . . . +	. . . . . + . . . . .
<i>Ficus erecta</i>	イヌビワ	K ₂	. . . . .	. . . . .	. . . . . + . . . . .
<i>Blechnum orientale</i>	ヒリュウシダ	K ₂	. . . . .	. . . . .	. . . . . + . . . . .
<i>Thelypteris torresiana</i>	アラゲヒメワラビ	K ₂	. . . . .	. . . . .	. . . . . +2
<i>Crassocephalum crepidioides</i>	ベニバナボロギク	K ₂	. . . . .	. . . . .	. . . . . + . . . . .
<i>Ranunculus quelpaertensis</i>	キツネノボタン	K ₂	. . . . .	. . . . .	. . . . . 1-2 +
<i>Polygonum longisetum</i>	イヌタデ	K ₂	. . . . .	. . . . .	. . . . . + . . . . +2
<i>Phyllanthus urinaria</i>	コミカンソウ	K ₂	. . . . .	. . . . .	. . . . . + . . . . +2
<i>Sonchus oleraceus</i>	ハルノノゲシ	K ₂	. . . . .	. . . . .	. . . . . + . . . . + . . . . .
<i>Lipocarpa microcephala</i>	ヒンジガヤツリ	K ₂	. . . . .	. . + . . . .	. . . . . + . . . . .
Außerdem je einmal in Aufnahme 出現一回の種					

Nr. 4, *Commelina diffusa* シマツクサ K₂ - +; in Nr. 5, *Cyperus brevifolius* アイダクグ K₂ - +; in Nr. 6, *Mucuna macrocarpa* イルカンド K₂ - +, *Polygonum barbatum* ケタデ K₂ - +2; in Nr. 7, *Scirpus ternatanus* オオアブラガヤ K₂ - 2-2, *Carex* sp. K₂ - +2, *Silene* sp. K₂ - +, *Ranunculus sieboldii* シマキツネノボタン K₂ - +, *Eriogonum* オオアブラガヤ K₂ - 2-2, K₂ - +, *Euphorbia* sp. K₂ - +, *Sansevieria nilotica* チトセラン K₂ - +; in Nr. 8, *Echinochloa crus-galli* var. *hispidula* タビエ K₂ - +, *Scirpus maritimus* コウキヤガラ K₂ - +, *Melilotus suaveolens* シナガワハギ K₂ - +; in Nr. 9, *Alnus japonica* ハンノキ K₁ - 1-1, K₂ - +2, *Casuarina equisetifolia* モクマオウ K₁ - 1-1, K₂ - +2, *Ormocarpum cochinchinense* ハマセンナ K₁ - +, *Casuarina glauca* グラウカモクマオウ K₁ - +, *Myrica rubra* ヤマモモ K₁ - +, K₂ - +2, *Pinus luchuensis* リュウキュウマツ K₂ - +2, *Sacciolepis indica* ハイヌメリ K₂ - +2, *Pogonatherum crinitum* イタチガヤ K₂ - +, *Glochidion zeylanicum* カキバカンノキ K₂ - +, *Digitaria violascens* アキメヒシバ K₂ - +, *Lycopodium cernuum* ミズズギ K₂ - +2, *Hypericum japonicum* ヒメオトギリ K₂ - +, *Sphenomeris chinensis* ホラシノブ K₂ - +, *Scleria levis* シンジュガヤ K₂ - +; in Nr. 10, *Urena lobata* オオボシレンシカ K₂ - +, *Barringtonia racemosa* サガリバナ K₂ - +; in Nr. 12, *Schima wallichii* ssp. *liukiuensis* イジュ K₁ - +, *Rubus grayanus* リュウキュウイチゴ K₁ - +, *Pteris semipinnata* オオアマクサシダ K₂ - +; in Nr. 13, *Ipomoea batatas* サツマイモ K₂ - +2; in Nr. 19, *Paederia scandens* ヘクソカズラ K₁ - +, K₂ - +2; in Nr. 20, *Duchesnea chrysantha* ヘビイチゴ K₂ - +, *Euphorbia chamaesyce* ハイニシキソウ K₂ - +2, *Sonchus asper* オニノノゲシ K₂ - +; in Nr. 21, *Wendlandia formosana* アカミズキ K₂ - +, *Anagallis arvensis* f. *caerulea* ルリハコベ K₂ - +; in Nr. 22, *Camellia sinensis* チャノキ K₁ - 3-3, *Gnaphalium japonicum* ssp. *affine* ハハコグサ K₂ - +; in Nr. 24, *Citrus x tankan* タンカン K₁ - 4-3 *Fimbristylis dichotoma* クグテンツキ K₂ - +2; in Nr. 25, *Artemisia princeps* var. *orientalis* ヨモギ K₂ - +2, *Gnaphalium purpureum* チチコグサモドキ K₂ - +2