

Table S1. Individual density and average tree height of advance regeneration group and seedlings for each species in the (a) understory-intact plot and (b) understory-cleared plot. S-AR, R-AR and SE denote surviving advance regenerations, resprouted advance regenerations and seedlings, respectively.

(a) Understory-intact plot

Species groups / Species	Seed dispersal types ^a	Individual density (no./ha)						Average tree height (m)						
		S-AR		R-AR		SE		S-AR		R-AR		SE		
		2006	2017	2006	2017	2006	2017	2006	2017	2006	2017	2006	2017	
Pioneer														
<i>Aralia elata</i>	F	0	0	0	0	632	0	0	0	0	0	0	0.1	0
<i>Boehmeria spicata</i>	F	0	0	0	0	95	0	0	0	0	0	0	0.2	0
<i>Clerodendrum trichotomum</i>	F	0	0	0	0	516	32	0	0	0	0	0	0.4	2.1
<i>Evodia meliaefolia</i>	F	0	0	0	0	21	0	0	0	0	0	0	0.2	0
<i>Fagara ailanthoides</i>	F	0	0	0	0	7389	189	0	0	0	0	0	0.3	6.6
<i>Fagara manchurica</i>	F	0	0	0	0	105	11	0	0	0	0	0	0.3	1.7
<i>Idesia polycarpa</i>	F	0	0	0	0	5611	158	0	0	0	0	0	0.2	6.4
<i>Mallotus japonicus</i>	F	0	0	0	0	8905	537	0	0	0	0	0	0.2	5.6
<i>Rhus javanica</i>	F	0	0	0	0	116	126	0	0	0	0	0	0.1	4.7
<i>Rhus succedanea</i>	F	0	0	0	0	0	11	0	0	0	0	0	0	8.0
<i>Rhus sylvestris</i>	F	0	0	0	0	21	0	0	0	0	0	0	0.7	0
<i>Rhus trichocarpa</i>	F	0	0	0	0	11	11	0	0	0	0	0	0.2	1.0
<i>Rosa multiflora</i>	F	0	0	0	0	21	0	0	0	0	0	0	0.3	0
<i>Rubus crataegifolius</i>	F	0	0	0	0	1589	0	0	0	0	0	0	0.2	0
<i>Rubus palmatus</i>	F	0	0	0	0	189	0	0	0	0	0	0	0.2	0
<i>Rubus sumatranus</i>	F	0	0	0	0	568	0	0	0	0	0	0	0.3	0
<i>Sambucus racemosa</i>	F	0	0	0	0	21	0	0	0	0	0	0	0.2	0
<i>Stachyurus praecox</i>	F	11	11	0	0	779	295	0.4	4.5	0	0	0	0.2	2.9
<i>Villebrunea frutescens</i>	F	0	0	0	0	0	221	0	0	0	0	0	0.0	1.1
<i>Albizia julibrissin</i>	W	0	0	0	0	53	0	0	0	0	0	0	0.2	0
Total		11	11	0	0	26642	1589	0.4	4.5	0	0	0	0.2	4.5
Coppice shrub														
<i>Antidesma japonicum</i>	F	11	11	11	11	63	179	4.3	4.7	1.4	2.7	0.2	2.0	
<i>Callicarpa japonica</i>	F	11	11	0	0	526	379	1.8	4.5	0	0	0.2	2.0	
<i>Callicarpa mollis</i>	F	11	11	21	21	1979	663	1.5	1.8	0.7	1.6	0.2	1.9	
<i>Cudrania cochinchinensis</i>	F	0	0	0	0	21	0	0	0	0	0	0.1	0	
<i>Glochidion obovatum</i>	F	0	0	0	0	11	0	0	0	0	0	0.1	0	
<i>Hebdingia japonica</i>	F	0	0	0	0	137	158	0	0	0	0	0.2	1.4	
<i>Ilex crenata</i>	F	0	0	0	0	11	0	0	0	0	0	0.1	0	
<i>Phyllanthus flexuosus</i>	F	0	0	0	0	137	63	0	0	0	0	0.2	2.0	
<i>Prenna microphylla</i>	F	21	11	11	0	558	126	0.6	4.8	1.4	0	0.2	2.2	
<i>Viburnum dilatatum</i>	F	0	0	0	0	21	0	0	0	0	0	0.3	0	
<i>Viburnum erosum</i>	F	0	0	0	0	11	0	0	0	0	0	0.1	0	
<i>Xylosma congestum</i>	F	11	11	0	0	0	0	2.1	4.5	0	0	0	0	
<i>Zanthoxylum piperitum</i>	F	0	0	0	0	11	0	0	0	0	0	0.2	0	
Total		63	53	42	32	3484	1568	1.8	4.1	1.1	2	0.2	1.9	
Coppice tree														
<i>Quercus serrata</i>	G	0	0	0	0	0	11	0	0	0	0	0	0	2.2
<i>Aphananthe aspera</i>	F	0	0	0	0	21	11	0	0	0	0	0.1	0.8	
<i>Celtis sinensis</i>	F	0	0	0	0	32	0	0	0	0	0	0.2	0	
<i>Comus controversa</i>	F	0	0	0	0	0	21	0	0	0	0	0	0	5.5
<i>Comus macrophylla</i>	F	0	0	0	0	84	84	0	0	0	0	0.3	5.3	
<i>Diospyros japonica</i>	F	0	0	0	0	0	21	0	0	0	0	0	0	2.6
<i>Ehretia ovalifolia</i>	F	11	11	0	0	5147	84	18	25	0	0	0.1	7.5	
<i>Euscaphis japonica</i>	F	0	0	0	0	0	84	0	0	0	0	0	0	5.0
<i>Morus australis</i>	F	0	0	0	0	0	42	0	0	0	0	0	0	1.5
<i>Prunus jamasakura</i>	F	0	0	0	0	0	126	0	0	0	0	0	0	2.4
<i>Styrax japonica</i>	F	0	0	0	0	0	137	0	0	0	0	0	0	3.3
Total		11	11	0	0	5284	621	18	25	0	0	0.1	4.0	

<i>Fagara ailanthoides</i>	F	0	0	0	0	8109	158	0	0	0	0	0.2	7.1
<i>Fagara manchurica</i>	F	0	0	0	0	12	0	0	0	0	0	0.2	0
<i>Idesia polycarpa</i>	F	0	0	0	0	2012	170	0	0	0	0	0.1	6.7
<i>Mallotus japonicus</i>	F	0	0	0	0	13733	2012	0	0	0	0	0.2	6.2
<i>Rhus javanica</i>	F	0	0	0	0	291	48	0	0	0	0	0.1	5.6
<i>Rhus succedanea</i>	F	0	0	0	0	24	0	0	0	0	0	0.1	0
<i>Rhus sylvestris</i>	F	0	0	0	0	388	0	0	0	0	0	0.2	0
<i>Rubus crataegifolius</i>	F	0	0	0	0	1370	0	0	0	0	0	0.2	0
<i>Rubus palmatus</i>	F	0	0	0	0	473	48	0	0	0	0	0.2	1.4
<i>Rubus sieboldii</i>	F	0	0	0	0	0	170	0	0	0	0	0	0.8
<i>Sambucus racemosa</i>	F	0	0	0	0	24	12	0	0	0	0	0.1	4.0
<i>Stachyurus praecox</i>	F	0	0	0	0	1855	388	0	0	0	0	0.2	4.0
<i>Wikstroemia trichotoma</i>	F	0	0	0	0	145	291	0	0	0	0	0.3	0.9
<i>Albizia julibrissin</i>	W	0	0	0	0	570	61	0	0	0	0	0.1	5.3
<i>Deutzia scabra</i>	W	0	0	0	0	109	121	0	0	0	0	0.2	1.9
Total		0	0	0	0	31382	3648	0	0	0	0	0.2	5.2
Coppice shrub													
<i>Callicarpa japonica</i>	F	0	0	24	12	218	303	0	0	0.2	0.8	0.1	1.6
<i>Callicarpa mollis</i>	F	0	0	97	73	727	618	0	0	0.3	2.2	0.1	1.9
<i>Hebvingia japonica</i>	F	0	0	0	0	24	85	0	0	0	0	0.2	1.3
<i>Phyllanthus flexuosus</i>	F	0	0	0	0	73	73	0	0	0	0	0.2	3.1
<i>Premna microphylla</i>	F	0	0	36	24	24	36	0	0	0.5	6.1	0.2	4.7
Total		0	0	158	109	1067	1115	0	0	0.3	2.9	0.1	2.0
Coppice tree													
<i>Aphananthe aspera</i>	F	0	0	0	0	12	12	0	0	0	0	0.7	1.9
<i>Comus controversa</i>	F	0	0	0	0	12	12	0	0	0	0	0.1	9.0
<i>Comus macrophylla</i>	F	0	0	0	0	121	121	0	0	0	0	0.2	6.5
<i>Diospyros japonica</i>	F	0	0	0	0	0	109	0	0	0	0	0	8.1
<i>Ehretia ovalifolia</i>	F	0	0	0	0	303	36	0	0	0	0	0.2	2.0
<i>Euscaphis japonica</i>	F	0	0	0	0	12	12	0	0	0	0	0.1	3.3
<i>Lindera erythrocarpa</i>	F	0	0	0	0	24	12	0	0	0	0	0.1	6.1
<i>Morus australis</i>	F	0	0	0	0	885	255	0	0	0	0	0.2	2.8
<i>Picrasma quassioides</i>	F	0	0	0	0	0	12	0	0	0	0	0	6.7
<i>Prunus jamasakura</i>	F	0	0	12	12	218	327	0	0	1.6	6.7	0.3	4.2
<i>Syrax japonica</i>	F	0	0	0	0	61	291	0	0	0	0	0.2	4.5
<i>Syrax obasica</i>	F	0	0	0	0	24	12	0	0	0	0	0.2	5.9
<i>Fraxinus longicuspis</i> var. <i>latifolia</i>	W	0	0	12	12	0	0	0	0	0.4	4.8	0	0
Total		0	0	24	24	1673	1212	0	0	1	5.7	0.2	4.5
Lucidophyllous shrub													
<i>Camellia sasanqua</i>	G	0	0	0	0	12	36	0	0	0	0	0.2	2.1
<i>Ardisia crenata</i>	F	0	0	0	0	12	0	0	0	0	0	0.1	0
<i>Aucuba japonica</i>	F	0	0	255	182	97	448	0	0	0.4	2	0.1	1.5
<i>Dannacanthus indicus</i>	F	0	0	0	0	133	12	0	0	0	0	0.0	0.8
<i>Elaeagnus pungens</i>	F	0	0	0	0	12	12	0	0	0	0	0.3	0.9
<i>Eurya japonica</i>	F	0	0	170	158	339	3321	0	0	0.3	2.4	0.1	1.5
<i>Fatsia japonica</i>	F	0	0	36	0	12	0	0	0	0.3	0	0.1	0
<i>Ficus erecta</i>	F	0	0	873	800	1636	1309	0	0	0.8	3.1	0.1	2.1
<i>Ficus erecta</i> var. <i>sieboldii</i>	F	0	0	61	48	48	48	0	0	0.8	3.6	0.3	1.5
<i>Gardenia jasminoides</i>	F	0	0	24	12	12	24	0	0	0.4	3.1	0.2	0.8
<i>Lasianthus japonicus</i>	F	0	0	0	0	485	12	0	0	0	0	0.2	0.8
<i>Ligustrum japonicum</i>	F	0	0	61	61	48	121	0	0	0.6	4.4	0.2	2.1
<i>Maesa japonica</i>	F	0	0	0	0	2291	2473	0	0	0	0	0.2	0.8
<i>Myrsine seguinii</i>	F	0	0	0	0	0	24	0	0	0	0	0	0.8
Total		0	0	1479	1261	5139	7842	0	0	0.6	3	0.2	1.4
Lucidophyllous tree													
<i>Camellia japonica</i>	G	0	0	255	255	145	352	0	0	0.4	3.8	0.2	2.9
<i>Castanopsis</i> sp.	G	0	0	994	655	618	473	0	0	0.5	8	0.1	3.2
<i>Distylium racemosum</i>	G	0	0	12	12	0	0	0	0	0.3	0.9	0	0
<i>Pasania edulis</i>	G	0	0	0	0	0	12	0	0	0	0	0	6.8

<i>Quercus glauca</i>	G	0	0	242	218	121	279	0	0	0.5	5.7	0.2	4.2
<i>Quercus salicina</i>	G	0	0	24	24	0	0	0	0	0.3	5.3	0	0
<i>Quercus gihva</i>	G	0	0	36	24	12	36	0	0	0.5	4.8	0.1	2.4
<i>Cinnamomum camphora</i>	F	0	0	0	0	0	279	0	0	0	0	0	2.9
<i>Cinnamomum insularimontanum</i>	F	0	0	48	48	0	24	0	0	0.7	7.5	0	1.3
<i>Cleyera japonica</i>	F	0	0	12	0	0	0	0	0	0.3	0	0	0
<i>Daphniphyllum macropodum</i>	F	0	0	0	0	12	0	0	0	0	0	0.1	0
<i>Daphniphyllum teijsmannii</i>	F	0	0	0	0	12	73	0	0	0	0	0.2	2.0
<i>Diospyros morrisiana</i>	F	0	0	85	85	0	109	0	0	1.1	8.9	0	6.2
<i>Elaeocarpus japonicus</i>	F	0	0	0	0	0	12	0	0	0	0	0	7.4
<i>Elaeocarpus sylvestris</i>	F	0	0	0	0	12	24	0	0	0	0	0.4	5.9
<i>Ilex chinensis</i>	F	0	0	12	12	24	36	0	0	0.6	6.5	0.2	2.8
<i>Ilex integra</i>	F	0	0	12	0	24	12	0	0	0.5	0	0.3	7.7
<i>Ilex micrococca</i>	F	0	0	0	0	0	24	0	0	0	0	0	5.7
<i>Ilex rotunda</i>	F	0	0	24	24	12	36	0	0	0.9	2.4	0.1	2.0
<i>Litsea coreana</i>	F	0	0	12	12	0	48	0	0	0.9	7.2	0	1.9
<i>Melia azedarach</i>	F	0	0	0	0	12	0	0	0	0	0	0.3	0
<i>Meliosma rigida</i>	F	0	0	170	170	109	194	0	0	0.8	5.8	0.1	3.5
<i>Neolitsea aciculata</i>	F	0	0	12	12	24	36	0	0	0.4	5.1	0.1	2.0
<i>Neolitsea sericea</i>	F	0	0	12	12	36	0	0	0	0.3	3.8	0.1	0
<i>Persea japonica</i>	F	0	0	145	145	12	36	0	0	0.6	6.1	0.3	3.6
<i>Persea thunbergii</i>	F	0	0	48	48	764	182	0	0	0.7	7.5	0.2	3.4
<i>Prunus spinulosa</i>	F	0	0	12	12	36	24	0	0	0.1	1.5	0.2	2.2
Total		0	0	2170	1770	1988	2303	0	0	0.6	6.5	0.1	3.4
Total		0	0	3830	3164	41248	16121	0	0	0.6	4.9	0.2	2.8

^a F: Frugivore-dispersal, G: Gravity-dispersal, W: Wind-dispersal.