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Varien R. Tilton
Iowa State University

Nels R. Lersten
Iowa State University

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An Annotated Bibliography and Subject Index on Female Reproductive Anatomy and Fertilization in Angiosperms

VARIEN R. TILTON¹ and NELS R. LERSTEN

Department of Botany, Iowa State University, Ames, Iowa 50011

This bibliographic compilation is in two parts. One is coupled with a tabulated subject index of works on female reproductive anatomy and fertilization in angiosperms. It emphasizes papers published between 1965 and 1980, but a few citations predating 1966 are included. Although some entries are primarily methodological works, papers dealing strictly with experimental techniques, apomixis *per se*, incompatibility *per se*, floral morphology *per se*, teratological papers, abstracts, theses, and dissertations, have been omitted intentionally. The second bibliography encompasses theoretical discussions, broad summaries, review papers, books, other secondary sources, and some primary references covering a wide taxonomic range. It is indexed by author only.

INDEX DESCRIPTORS: angiosperms, female angiosperm reproductive anatomy, fertilization, megagametogenesis, megasporogenesis, ovary, ovule, stigma, style.

Because of the tremendous accumulation of information on angiosperm gynoecia and fertilization over the past several years, a need has arisen to compile this information in some fashion before it reaches unmanageable proportions. This bibliography and tabular subject-summary condenses information from citations concerning female reproductive anatomy and fertilization published between January 1966 and December 1980. Later papers were included as they became available. Thus, by referring to this bibliography and those in the works cited herein, one should be able to trace any given topic or genus that has been studied to date.

We have emphasized works published after 1965 so as not to be redundant with Maheshwari's (1950) *Introduction to the Embryology of Angiosperms* or Davis' (1966) *Systematic Embryology of the Angiosperms*. Completeness, however, dictates some temporal overlap but the narrowed subject and taxonomic indexing included here (as compared to the broad categorical arrangement in Maheshwari and the familial listings in Davis) should facilitate finding specific references.

Original investigations dealing with one genus, and other primary references that include several genera, of which only one is emphasized, are indexed by genus in Table 1. Other headings indicate information included on the various anatomical divisions of the female reproductive system and interactions between male and female tissues during pollination and fertilization. Numbers in Table 1 correspond to numbered citations in the main bibliography entitled, "Author Index I: Primary References included in Table 1."

To refine further the information available in Table 1, superscripts have been added to citation numbers in topic columns where

appropriate. These superscripts correlate with footnotes in Table 1 and indicate specific aspects of a topic included in a citation.

Original investigations which describe entire families or otherwise describe so many genera that no single genus is emphasized are included in a second bibliography. This second listing also contains broad topical summaries, review papers, books, papers which deal with theoretical topics, and other secondary sources. It is entitled, "Author Index II: Primary References not in Table 1, Theoretical Papers, Summaries, Reviews, and Books." It is thus a combination of primary and secondary references which cover either a wide taxonomic range, a wide admixture of topics, or a mixture of both. Because of this, citations in Author Index II are not indexed by genus or subject, but this list is short enough to allow easy access to individual references.

We intentionally have omitted abstracts, theses, dissertations, papers dealing strictly with experimental techniques, apomixis *per se*, incompatibility *per se*, floral morphology *per se*, post-fertilization phenomena, and teratological papers. However, we have cited a few methodological papers describing useful techniques for studying the female reproductive system and pollen tube growth if they had some anatomical data in addition to the methodological information.

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¹Permanent address: Agrigenetics Corporation, 5649 E. Buckeye Rd., Madison, WI 53716

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Table 1. Summary of subjects included in 711 primary sources from Author Index I on female angiosperm reproduction.

Genus ^b	Transmitting Tissue			SPOROPHYTE		Sporophyte/gametophyte		GAMETOPHYTE			Pollen tube/ synergid relationships		
	Stigma	Style	Ovary	Integuments	nucellus	megasporeogenesis	megagameteogenesis	anti-podals	egg apparatus	central cell	micropyle	synergids	syngamy
<i>Abelmoschus</i>	—	—	—	108,592	108 ^g ;592	592	592	108	108	108	—	—	108
<i>Abrus</i>	—	—	—	—	—	675	675	—	—	—	—	—	—
<i>Acer</i>	223 ^a	—	—	—	—	243	243 ^b	—	243	—	—	243 ^a	—
<i>Actinidia</i>	261 ^a	261 ^h	—	—	—	—	—	—	—	—	—	—	—
<i>Adansonia</i>	—	—	—	246 ^m	—	—	—	—	—	—	—	—	—
<i>Adelocaryum</i>	—	—	—	—	—	426	426	—	—	—	—	—	—
<i>Adenostemma^a</i>	—	—	—	494 ⁱ	—	494	494	—	—	—	—	—	—
<i>Adonis</i>	—	—	—	—	—	41	41	—	—	—	—	—	41
<i>Aesculus</i>	—	—	—	—	361 ^o	361	361	—	—	—	—	—	—
<i>Agathelpis</i>	—	—	—	—	—	503	503	—	—	—	—	—	—
<i>Agave</i>	—	—	—	—	—	—	398	—	—	—	—	—	—
<i>Agave</i> #	—	—	—	638	638	638	638	—	638	638	—	—	—
<i>Aglaia</i>	—	—	—	—	—	550	550	—	—	—	—	—	—
<i>Agrostis</i>	—	—	—	384	384	384,421	384,421	—	384	—	—	384	384
<i>Alectra</i>	—	—	—	—	—	684	684	—	—	—	—	—	—
<i>Aloe</i>	—	—	—	—	—	390	390	—	—	—	—	—	—
<i>Amannia</i>	—	—	—	—	—	—	597	—	—	—	—	—	—
<i>Amitostigma</i>	—	—	—	2 ^k	—	2	2	—	—	—	—	—	2
<i>Amphibolis^b</i>	177 ^g ;178 ^a	—	—	—	—	—	—	—	—	—	—	—	—
<i>Ananas</i>	—	—	—	—	508 ^p	508	508	—	—	—	—	—	—
<i>Androcymbium</i>	—	—	—	101 ⁱ	101 ^p	101	101	—	—	—	—	—	—
<i>Andrographis</i>	—	—	—	—	—	548	548	—	—	—	—	—	—
<i>Anemone</i>	—	—	—	—	—	642	642	—	—	—	—	—	705
<i>Anethum^b</i>	620	620	620	620	620 ^o	—	—	—	—	—	—	—	—
<i>Anisomeles</i>	—	—	—	268 ⁱ	268	268	268	—	—	—	—	—	—
<i>Anthemis</i>	—	—	—	—	—	56	56	—	—	—	—	56	—
<i>Antirrhinum</i>	170 ^a	170 ^h	—	47,525 ^o	525	—	—	—	—	—	—	—	—
<i>Aptenia^a</i>	330 ^{cd}	—	328 ⁱ	—	—	—	—	—	—	—	—	—	—
<i>Aptenia</i> #	329 ^c	—	—	—	—	—	—	—	—	—	—	—	—

Genus ^b	Transmitting Tissue			SPOROPHYTE		Sporophyte/gametophyte		GAMETOPHYTE			Pollen tube/ synergid relationships		
	Stigma	Style	Ovary	Integu- ments	nucellus	megasporogenesis	megagametogenesis	anti- podals	egg apparatus	central cell	micropyle	synergids	syngamy
<i>Aquilegia</i>	—	—	—	—	—	—	—	—	218	—	—	218	—
<i>Aquilegia</i> ^a	—	—	—	—	521	—	522'	522	—	219	—	—	—
<i>Aquilegia</i> ^a #	—	—	—	—	—	—	—	—	—	—	—	682	—
<i>Arachis</i>	—	—	—	—	—	465	465'	—	—	—	—	—	—
<i>Arceuthobium</i>	—	—	—	—	—	42,125,621	42,125,621	—	—	—	—	—	42
<i>Arctotis</i>	—	—	—	5'	—	5	5	—	—	—	—	—	—
<i>Argemone</i>	—	—	—	—	—	43	43	—	—	—	—	—	—
<i>Arnica</i>	—	—	—	193'	—	193	193	—	—	—	—	—	—
<i>Arundina</i>	—	—	—	507	507	507	507	—	—	—	—	—	—
<i>Asparagus</i>	—	—	366	—	—	349,366,367	349,366,367	—	—	—	—	—	—
<i>Aspicarpa</i> ^b	—	—	—	—	—	—	—	—	—	—	8 ^a	—	—
<i>Aster</i> ^b	—	287	—	—	—	—	—	—	—	—	—	—	—
<i>Astilbe</i>	—	—	—	—	—	557	557	—	—	—	—	—	—
<i>Aystasia</i> ^b	—	—	—	—	—	305	305	—	—	—	—	—	—
<i>Astragalus</i>	—	—	—	—	—	51,214	51,214	—	—	—	—	51'	—
<i>Aulax</i>	—	—	—	—	—	668	668	—	—	—	—	—	—
<i>Averrhoa</i>	153	153	153	—	—	—	—	—	—	—	—	—	—
<i>Axonopus</i>	—	—	—	—	—	228	228	—	—	—	—	—	—
<i>Bakeridesia</i>	321	321	—	—	—	—	—	—	—	—	—	—	—
<i>Barleria</i> ^b	—	—	—	—	—	304	304	—	—	—	—	—	—
<i>Basella</i>	—	—	—	—	—	373	373	—	—	—	—	—	—
<i>Bauera</i>	—	—	—	—	—	489	489	—	—	—	—	—	—
<i>Begonia</i>	350	350	—	—	—	—	—	—	—	—	—	—	—
<i>Bellis</i> #	—	—	—	195'	—	—	195'	—	—	—	—	195 ^a	—
<i>Bergenia</i>	—	—	—	—	558 ^b	558	558	—	—	—	—	—	—
<i>Bergia</i>	—	—	—	—	—	147	147	—	—	—	—	—	—
<i>Berteroa</i>	—	—	—	—	—	31	31	—	—	—	—	—	—
<i>Bixa</i> ^b	—	—	—	—	—	149	149	—	—	—	—	—	—
<i>Bixa</i>	—	—	—	—	—	309	309	—	—	—	—	—	—
<i>Blainvillea</i>	—	—	—	499'	—	499	499	—	—	—	—	—	—
<i>Blandfordia</i> ^a	—	—	—	—	—	—	—	—	—	—	—	122 ^a	—
<i>Bothriochloa</i> ^b	—	—	—	—	—	117	117	—	—	—	—	—	—
<i>Bothriochloa</i> ^a	—	—	—	—	417	—	—	—	—	—	—	—	—
<i>Bouteloua</i>	—	—	—	—	—	410	410	—	—	—	—	—	—
<i>Boykinia</i> ^b	—	—	—	—	—	685	685	—	—	—	—	—	—
<i>Brachycome</i>	—	—	—	—	—	581	581	—	—	—	—	—	581
<i>Brassica</i>	94'	—	—	—	—	—	—	—	—	—	—	—	—
<i>Brassica</i>	248',260'	—	—	346	346	346,363	363	—	—	—	—	—	—
<i>Brassica</i>	364',607'	364'	364'	—	—	514	514	—	—	—	—	364	364
<i>Brassica</i> ^a	452.5'	—	—	—	—	—	—	—	—	—	—	—	—
<i>Brassica</i> ^a #	541'	—	—	—	—	—	—	—	—	—	—	—	—
<i>Brassica</i> #	606'	—	—	—	—	—	—	—	—	—	—	—	—
<i>Bursaria</i> ^b	—	—	—	—	—	586	586	—	—	—	—	—	—
<i>Brodiaea</i>	—	—	—	—	—	39	39	—	—	—	—	—	—
<i>Browallia</i>	—	—	—	411'	—	411	411	—	—	—	—	—	—
<i>Buddleia</i>	—	—	—	—	—	32	32	—	—	—	—	—	—
<i>Bupleurum</i> ^a	—	—	—	—	—	128,221	—	—	—	—	—	—	—
<i>Bursera</i>	—	—	—	—	—	604	604	—	—	—	—	—	—
<i>Calendula</i> ^a	—	—	—	477',657'	657	476	476	—	—	—	—	—	85
<i>Caltha</i> ^b	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>Caltha</i>	—	—	—	—	—	270	270	—	—	—	—	—	—
<i>Calycanthus</i>	—	—	—	—	—	381	381	—	—	—	—	—	—
<i>Cannabis</i>	—	603 ^a	—	—	—	—	—	—	—	—	—	—	—
<i>Capsella</i> ^a	—	—	—	—	—	—	567 ^a	567	566	565,568	—	—	—
<i>Capsicum</i>	—	—	—	—	—	164	164	—	—	—	—	—	—
<i>Carex</i>	—	—	—	240	240	240	240	—	—	—	—	—	—
<i>Carya</i>	—	—	—	—	—	—	172	—	—	—	—	—	—
<i>Caryota</i>	—	—	—	—	—	587	587	—	—	—	—	—	—
<i>Cassia</i> ^b	—	—	—	249	249	249,518	—	—	—	—	—	—	—
<i>Cassia</i>	—	—	—	506	506	506	506	—	—	—	—	—	—
<i>Catharanthus</i> ^b	—	—	—	—	—	369	369	—	—	—	—	—	—
<i>Catharanthus</i> ^{a,b}	562 ^c	—	—	—	—	—	—	—	—	—	—	—	—
<i>Celosia</i>	—	—	—	290 ^a	—	—	—	—	—	—	—	—	—
<i>Cenchrus</i>	—	—	—	—	—	706	706	—	—	—	—	—	—
<i>Centrolepis</i>	—	—	—	—	—	485	485	—	—	—	—	—	—
<i>Cephalanthus</i>	—	—	—	—	—	555	555	—	—	—	—	—	—
<i>Chlorogalum</i>	—	—	—	—	—	102	102	—	—	—	—	—	—

Genus ^b	Transmitting Tissue			SPOROPHYTE		Sporophyte/gametophyte		GAMETOPHYTE			Pollen tube/ synergid relationships		
	Stigma	Style	Ovary	Integuments	nucellus	megasporogenesis	megagameteogenesis	anti-podals	egg apparatus	central cell	micropyle	synergids	syngamy
<i>Christisonia</i>	—	—	—	504 ⁱ	—	504	504	—	—	—	—	—	—
<i>Chrozophora</i>	—	—	75	75 ^m	75 ^p	—	—	—	—	—	—	—	—
<i>Chrysanthemum^b</i>	—	—	—	—	—	—	—	639	—	—	—	—	—
<i>Cicer</i>	—	—	—	—	—	—	464 ^t	—	—	—	—	—	—
<i>Cirsium</i>	—	—	—	—	—	709	709	—	—	—	—	—	—
<i>Cissus</i>	—	—	—	624 ^a	—	435	435	—	—	—	—	—	—
<i>Citrullus</i>	576 ^a	576 ^b	576 ^c	—	—	—	90	—	—	—	—	—	—
<i>Citrullus[*]</i>	576 ^{c,d,e}	—	—	—	—	—	—	—	—	—	—	—	—
<i>Citrus</i>	227	227	—	—	—	—	—	—	—	—	—	—	202
<i>Clematis</i>	—	—	—	—	—	216	216	—	86	—	—	—	86
<i>Cleome</i>	—	—	—	—	—	213,509	213,509	—	—	—	—	—	—
<i>Clintonia</i>	—	—	—	—	—	457	457	—	—	—	—	—	—
<i>Colletia</i>	—	—	—	—	—	343	343	—	—	—	—	—	—
<i>Collinsia^b</i>	—	—	—	—	—	564	564	—	—	—	—	—	—
<i>Conium[*]</i>	—	—	—	—	—	—	184	—	184	—	—	—	—
<i>Cordia</i>	—	—	—	211 ⁱ	—	211	211	—	—	—	—	—	—
<i>Coriaria</i>	—	—	—	584	584	584	584	—	—	—	—	—	—
<i>Cornus</i>	—	—	—	—	—	595	595,596	—	—	—	—	—	—
<i>Cortaderia</i>	—	—	473 ^a	—	—	—	130,473 ⁱ	—	—	—	473 ^a	473 ^a	—
<i>Cortaderia[*]</i>	—	—	—	—	474	—	—	—	—	—	—	—	—
<i>Corylus</i>	629 ^a	629 ^b	—	—	—	—	—	—	—	—	—	629	629
<i>Corynaea</i>	194	194	—	—	—	194	194	—	—	—	—	—	—
<i>Crepis</i>	—	—	—	—	—	—	—	—	—	—	—	226 ^a	226
<i>Crepis[*]</i>	—	—	—	—	—	—	—	—	229,230	—	—	—	—
<i>Crinum</i>	—	—	—	640	640 ^a	—	—	640	—	—	—	—	—
<i>Crocus[*]</i>	255	—	—	—	—	—	—	—	—	—	—	—	—
<i>Crocus^b</i>	—	—	711	—	—	—	—	—	—	—	—	—	—
<i>Croton</i>	—	—	—	513	513	513	513	—	—	—	—	—	—
<i>Cuminum^b</i>	—	—	578	578 ⁱ	578 ^a	578	578	—	—	—	—	—	—
<i>Cyanotis</i>	—	—	—	—	—	338	338	—	—	—	—	—	—
<i>Cyatocline</i>	—	—	—	—	—	160	160	—	—	—	—	—	160
<i>Cynoglossum</i>	—	—	—	—	—	314	314	—	—	—	—	—	—
<i>Cynorchis</i>	—	—	—	—	—	677	677	—	—	—	—	—	—
<i>Cynorchis^b</i>	—	—	—	—	—	—	678	—	—	—	—	—	—
<i>Cyperus^b</i>	—	—	—	319	319 ^a	319	319	—	—	—	—	—	—
<i>Cyperus</i>	—	—	—	—	—	429,456	429,456	—	—	—	—	—	—
<i>Cyphostemma</i>	—	—	—	—	—	436	436	—	—	—	—	—	—
<i>Cypripedium^b</i>	—	—	—	—	—	481	481	—	—	—	—	—	—
<i>Cyrilla^b</i>	—	—	—	680 ^{a,i}	—	680	680	—	—	—	—	—	—
<i>Cytisus</i>	—	—	—	—	—	129	—	—	—	—	—	—	—
<i>Dactyliandra</i>	—	—	—	—	—	145	145	—	—	—	—	—	—
<i>Datura</i>	554	89,554	—	—	—	—	—	—	—	—	—	—	—
<i>Delphinium</i>	—	—	—	—	—	—	—	87	87	87	—	—	—
<i>Dendrobium</i>	—	—	—	—	265	265	—	—	—	—	—	—	—
<i>Dendromecon</i>	—	—	—	38	38 ^a	38	38	—	—	—	—	38	38
<i>Diarrhena</i>	—	—	—	—	—	569	—	—	—	—	—	—	—
<i>Dichanthium</i>	—	—	—	—	—	157,515,551	157,515,551	—	—	—	—	—	—
<i>Dichapetalum</i>	—	—	—	68	—	—	—	—	—	—	—	—	—
<i>Dicliptera</i>	—	—	—	—	—	552	552	—	—	—	—	—	—
<i>Diplacrum</i>	—	—	—	446	446	446	446	—	—	—	446	446	—
<i>Diploaxis[*]</i>	334 ^a	—	—	135	—	—	—	—	—	—	—	—	—
<i>Disporum</i>	—	—	—	—	—	615	615	—	—	—	—	—	—
<i>Downingia</i>	—	300 ^a	300 ⁱ	300 ⁱ ,301 ⁱ	—	301	300,301	—	—	—	—	—	300
<i>Drimys</i>	20	20	646	646	646	—	—	—	—	—	—	—	—
<i>Eclipta</i>	—	—	—	501 ⁱ	—	501	501	—	—	—	—	—	—
<i>Ehretia</i>	—	—	—	315 ⁱ	—	315	315	—	—	—	—	—	—
<i>Eleocharis</i>	—	—	455	—	—	455	455	—	—	—	—	—	—
<i>Elettaria^b</i>	—	—	—	—	—	463	463	—	—	—	—	—	—
<i>Eleusine^b</i>	—	—	—	—	—	116	116	116	—	—	—	—	—
<i>Eleutherine^b</i>	—	—	—	—	—	672	672	—	—	—	—	—	—
<i>Emilia</i>	—	—	—	497 ⁱ	—	497	497	—	—	—	—	—	—
<i>Epidendrum[*]</i>	—	—	—	—	—	—	123	—	—	—	—	—	—
<i>Epidendrum[#]</i>	—	—	—	—	—	—	124	—	—	—	—	—	—
<i>Epidendrum^b</i>	—	—	—	—	—	609	—	—	—	—	—	124 ^a	—
<i>Epilobium[*]</i>	—	—	—	—	—	26	26	—	—	—	—	—	—
<i>Epilobium</i>	—	—	—	—	—	27,528	—	—	—	—	—	26 ^a	—
<i>Epipactis[*]</i>	—	—	—	—	—	28	—	—	—	—	—	—	—

Genus ^b	Transmitting Tissue			SPOROPHYTE		Sporophyte/gametophyte		GAMETOPHYTE			Pollen tube/ synergid relationships		
	Stigma	Style	Ovary	Integu- ments	nucellus	megasporogenesis	megagameteogenesis	anti- podals	egg apparatus	central cell	micropyle	synergids	syngamy
<i>Epipactis</i> ^b	—	—	—	—	—	341	—	—	—	—	—	—	—
<i>Epipactis</i>	—	—	—	—	—	527	—	—	—	—	—	—	—
<i>Epipactis</i> ^a	—	—	—	—	—	533	—	—	—	—	—	—	—
<i>Eragrostis</i>	—	—	—	—	—	649	84,649	—	—	—	—	—	—
<i>Eranthis</i>	—	—	—	79	—	—	—	—	—	—	—	—	—
<i>Erica</i>	—	—	—	524 ^f	—	524	524	—	—	—	—	—	—
<i>Eriocaulon</i>	—	—	—	29 ^f	—	29	29	—	—	—	—	—	—
<i>Eruca</i>	—	—	—	490	490 ^a	490	490	—	—	—	—	—	—
<i>Erythrina</i>	—	—	—	—	—	389	389	—	—	—	—	—	—
<i>Erythroxylem</i>	—	—	—	69	—	—	—	—	—	—	—	—	—
<i>Eschscholzia</i> ^a	583 ^a	583 ^h	—	—	—	—	—	—	220	—	—	—	—
<i>Euonymus</i>	—	—	—	—	—	127	127	—	—	—	—	—	—
<i>Euphorbia</i> ^b	—	—	73	73	73 ^p	73	73	—	—	—	—	—	—
<i>Euphorbia</i>	—	—	74	74 ^a	74 ^a	74,105,484	105,484	—	—	—	—	—	—
<i>Euphorbia</i>	—	—	—	—	—	496,674	496,674	—	—	—	—	—	—
<i>Euphorbia</i> ^a	—	—	—	—	234	—	—	—	—	—	—	—	—
<i>Euphorbia</i> ^a #	—	—	—	—	—	—	236	—	—	—	—	—	—
<i>Eustoma</i>	—	—	—	—	—	173	173	—	—	—	—	—	—
<i>Exbucklandia</i>	—	—	—	—	—	306	306	—	—	—	—	—	—
<i>Farmeria</i>	—	—	—	—	11 ^o	—	11	11	—	—	—	—	—
<i>Festuca</i>	—	—	—	385	—	385	385	—	—	—	—	—	—
<i>Ficaria</i> ^b	—	—	—	—	—	205	205	—	—	—	—	—	—
<i>Ficus</i>	—	—	—	—	—	241	241	—	—	—	—	—	—
<i>Fimbristylis</i>	—	—	—	—	—	423	423	—	—	—	—	—	—
<i>Fimbsia</i> ^b	669	669	—	—	669 ^{a,p}	669	669	—	—	—	—	—	—
<i>Flacourtia</i>	—	—	—	—	—	151	151	—	—	—	—	—	—
<i>Flagellaria</i>	—	—	—	614	614	614	614	—	—	—	—	—	—
<i>Forstera</i> ^b	—	—	—	—	—	475	475	—	—	—	—	—	—
<i>Forsythia</i> ^a	180 ^o	—	—	—	—	—	—	—	—	—	—	—	—
<i>Forsythia</i> ^a #	181;182 ^c	—	—	—	—	—	—	—	—	—	—	—	—
<i>Forsythia</i>	183 ^d	183 ^a	183 ⁱ	—	—	—	—	—	—	—	—	—	—
<i>Fuchsia</i> ^a	—	—	—	—	—	526	—	—	—	—	—	—	—
<i>Fuchsia</i> ^a	—	—	—	—	—	532	—	—	—	—	—	—	—
<i>Fuirena</i> ^b	—	—	445	—	—	445	445	—	—	—	—	—	—
<i>Fumaria</i>	—	—	—	—	—	—	—	577	—	—	—	—	—
<i>Gagea</i>	—	—	—	—	—	326	326	—	—	—	—	—	—
<i>Galanthus</i>	—	—	—	—	—	200	—	—	—	—	—	—	198
<i>Garrya</i>	—	—	—	296	296 ^a	296	296	—	—	—	—	—	—
<i>Gasteria</i> ^a	—	—	—	—	—	693	693	—	—	—	—	—	—
<i>Gastrodia</i>	—	—	—	—	—	1	1	—	—	—	—	—	1
<i>Gazania</i>	—	—	—	6 ^f	—	6	6	—	—	—	—	—	—
<i>Genista</i>	—	—	—	—	—	237	237	—	—	—	—	—	—
<i>Gentiana</i>	—	—	—	80	—	—	—	—	—	—	—	—	—
<i>Geranium</i> ^b	—	—	65	—	—	65	65	—	—	—	—	—	—
<i>Geranium</i>	—	—	—	—	—	339	339	—	—	—	—	—	—
<i>Gibasis</i>	608	608	608	—	—	608	608	—	—	—	—	—	—
<i>Gilia</i> ^a	—	—	—	299 ^f	299	299	299	—	—	—	—	—	—
<i>Gladiolus</i> ^a #	120 ^a	120 ^h	—	—	—	—	—	—	—	—	—	—	—
<i>Gladiolus</i>	121 ^a	—	—	—	—	—	—	—	—	—	—	—	—
<i>Gladiolus</i> ^a	322 ^a	—	—	—	—	—	—	—	—	—	—	—	—
<i>Glinus</i>	—	—	437	—	—	437	437	—	—	—	—	—	—
<i>Glycine</i> ^b	—	—	—	—	—	225	225	—	—	—	—	—	—
<i>Glycine</i>	—	—	—	486	486	244,486	486	—	—	—	—	—	—
<i>Glycine</i> ^a	—	—	—	520	520	—	—	—	—	—	—	—	—
<i>Glycosmis</i>	—	—	67	—	—	67	67	—	—	—	—	—	—
<i>Gossypium</i>	163	163,617 ^h	—	—	—	—	—	—	—	—	—	217 ^a	—
<i>Gossypium</i>	283;291	283;291	—	—	291 ^{a,p}	291	291	—	—	—	—	291	—
<i>Gossypium</i> ^a	—	—	—	—	—	—	—	—	275	276	—	—	—
<i>Gossypium</i> ^a #	282 ^a	282 ^h	—	—	—	—	—	—	278	278	—	—	280
<i>Gossypium</i> ^a	—	—	—	—	—	—	—	—	277,279	—	—	—	—
<i>Gossypium</i> ^a #	—	—	—	—	—	—	—	—	—	—	—	277, 281 ^{a,v}	—
<i>Grevillea</i>	664	664	—	—	664 ^{a,p}	664	664	—	—	—	—	664	—
<i>Griffithella</i>	—	—	—	—	—	—	431	—	—	—	—	—	—
<i>Grindelia</i> ^b	—	—	—	—	—	263	263	—	—	—	—	—	—
<i>Guizotia</i>	—	—	—	—	—	118	118	—	—	—	—	—	—
<i>Habenaria</i>	—	—	—	—	—	415	415	—	—	—	—	—	—
<i>Hakea</i>	—	—	—	—	666 ^o	666	666	—	—	—	—	—	—

Genus ^b	Transmitting Tissue			SPOROPHYTE		Sporophyte/gametophyte		GAMETOPHYTE			Pollen tube/ synergid relationships		
	Stigma	Style	Ovary	Integuments	nucellus	meegasporogenesis	megagameteogenesis	anti-podals	egg apparatus	central cell	micropyle	synergids	syngamy
<i>Haloragis</i>	—	—	—	293	293	293,444	293,444	—	—	—	—	—	—
<i>Hebenstreitia</i>	—	—	—	623 ^f	—	623	623	—	—	—	—	—	—
<i>Helianthus</i> * #	—	—	—	440 ^f	440	440	440,442 ^f	440,442	440,442	440,442	—	—	—
<i>Helianthus</i> *	—	—	—	—	—	—	—	—	—	—	441	441	441
<i>Helianthus</i>	689 ^{g,*}	—	—	—	—	—	—	—	625	625	—	625	625
<i>Heliotropium</i> ^b	48	48	—	—	—	—	—	—	—	—	—	—	—
<i>Heliotropium</i>	316	—	—	316 ^f	—	316	316	—	—	—	—	—	—
<i>Helleborus</i>	—	—	—	—	—	204	204	—	—	—	—	—	—
<i>Hibiscus</i>	91	91	—	—	—	—	—	—	—	—	—	—	—
<i>Holarrhena</i>	—	—	—	—	—	348	348	—	—	—	—	—	—
<i>Holcus</i>	—	—	—	—	—	690	690	—	—	—	—	—	—
<i>Hordeum</i>	—	—	—	—	—	—	97	97	33,97	97	—	97	97
<i>Hordeum</i> ^b #	—	—	—	—	—	—	—	83	—	—	—	—	—
<i>Hordeum</i> * #	99 ^g	99 ^g	—	—	—	—	—	—	—	—	—	—	—
<i>Hyacinthus</i> ^b	—	—	—	—	—	—	—	648	—	—	—	—	—
<i>Hydnocarpus</i>	—	—	—	—	—	152	152	—	—	—	—	—	—
<i>Hydrobryopsis</i>	—	—	—	—	—	12	12	—	12	—	—	—	—
<i>Hydrobryum</i>	—	—	—	—	—	432	432	—	—	—	—	—	—
<i>Hymenitherum</i>	—	—	—	—	—	468	468	—	—	—	—	—	—
<i>Hypoxis</i>	—	—	—	—	—	10	10	—	—	—	—	—	—
<i>Incarvillea</i>	594 ^g	594 ^h	594 ^f	—	—	—	—	—	—	—	—	—	—
<i>Indigofera</i>	—	—	—	—	376 ^p	19,376	19,376	—	—	—	—	—	—
<i>Iodina</i>	—	—	—	46	46	46	46	—	—	—	—	—	—
<i>Ipomoea</i>	—	—	—	—	—	106,308	106,308	—	—	—	—	—	—
<i>Ipomoea</i>	380	380	—	—	—	310	310	—	—	—	—	—	—
<i>Iris</i>	—	—	—	—	—	352,353 ^f	—	—	—	—	—	—	—
<i>Jasione</i> *	—	—	—	—	—	—	40	—	201	—	—	—	—
<i>Jasione</i>	—	—	—	199 ^f	199	199	196,197,199	—	197	—	—	—	—
<i>Jubaeopsis</i>	—	—	—	523	523	523	523	—	—	—	—	—	—
<i>Juglans</i> ^b	—	—	—	66	—	—	—	—	—	—	—	—	—
<i>Juglans</i>	—	—	—	—	—	76	76	—	—	—	—	—	—
<i>Koeleruteria</i>	23 ^c	—	—	—	—	—	—	—	—	—	—	—	—
<i>Laburnum</i>	—	—	—	—	—	516	—	—	—	—	—	—	—
<i>Lagenaria</i>	—	—	—	—	—	447	447	—	—	—	—	—	—
<i>Lambertia</i>	—	—	—	—	665 ^p	665	665	—	—	—	—	—	—
<i>Lansium</i>	—	—	—	—	—	488	488	—	—	—	—	—	—
<i>Lantana</i>	—	—	—	318 ^f	—	318	318	—	—	—	—	—	—
<i>Lapageria</i> ^b	—	—	—	—	—	100	100	—	—	—	—	—	—
<i>Laurembergia</i>	—	—	—	—	24 ^p	24,428	24,428	—	—	—	—	—	—
<i>Ledum</i> ^b	482	482	—	—	—	—	—	—	—	—	—	—	—
<i>Leea</i>	—	—	—	—	—	433	433	—	—	—	—	—	—
<i>Leiothrix</i>	—	—	—	—	—	416	416	—	—	—	—	—	—
<i>Leucanthemum</i>	—	—	—	—	—	492 ^g	492	—	—	—	—	—	—
<i>Lilium</i>	701;702	701;702	701 ^f	—	—	628 ^g	—	—	—	—	—	—	—
<i>Lilium</i>	266;342 ^g	266;342 ^h	—	—	—	206 ^g	—	—	—	—	—	—	—
<i>Lilium</i>	167, 692 ^g	692 ^h	692 ^{f,j}	—	—	34,35 ^g	—	—	—	—	—	—	—
<i>Lilium</i> ^b *	—	—	—	—	—	59	—	—	—	—	—	—	—
<i>Lilium</i> *	—	656	—	—	—	—	536,537	538	538	—	—	—	—
<i>Lilium</i> *	—	—	—	—	—	535	395,534	—	—	395	—	—	—
<i>Lilium</i> *	—	—	—	—	—	60,168	393,394	—	—	—	—	—	—
<i>Lilium</i> * #	544 ^c	543;544, 144 ^{f,h}	—	—	—	169 ^g	—	—	—	—	—	—	—
<i>Linderina</i>	—	—	—	14 ^f	—	14	14	—	—	—	—	—	—
<i>Lindmania</i>	—	—	—	—	—	344	344	—	—	—	—	—	—
<i>Linum</i>	179	—	64	64 ^f	—	64	64	—	659	143,659	—	—	—
<i>Linum</i> *	—	—	—	—	662	—	141,662	—	660	660	—	—	—
<i>Linum</i> *	—	—	—	—	658	—	—	661	140	—	—	663	142
<i>Liriodendron</i>	—	—	—	77	—	—	—	—	—	—	—	—	—
<i>Livistona</i>	—	—	—	337 ^f	—	337	337	—	—	—	—	—	—
<i>Lobularia</i> ^b * #	—	—	—	483	—	—	—	—	—	—	—	—	—
<i>Lupinus</i>	—	—	—	—	—	311,312	311,312	—	—	—	—	—	—
<i>Lycopersicon</i> *	—	137	—	—	—	—	—	—	—	—	—	—	—
<i>Lycopersicon!</i>	—	379 ^g	—	—	—	—	—	—	—	—	—	—	—
<i>Lycopersicum</i> * #	185 ^c	—	—	—	—	—	—	—	—	—	—	—	—
<i>Lycopersicum</i>	—	—	—	—	454	454	—	—	—	—	—	—	—
<i>Lythrum</i>	563 ^g	563 ^h	—	—	—	—	—	—	—	—	—	—	—

Genus ^b	Transmitting Tissue			SPOROPHYTE		Sporophyte/gametophyte		GAMETOPHYTE			Pollen tube/ synergid relationships		
	Stigma	Style	Ovary	Integu- ments	nucellus	megasporogenesis	megagameteogenesis	anti- podals	egg apparatus	central cell	micropyle	synergids	syngamy
<i>Macadamia</i> ^b	670	670	—	—	670 ^{o,p}	670	670	—	—	—	—	—	—
<i>Machaeranthera</i>	—	—	—	262 ⁱ	—	262	262	—	—	—	—	—	—
<i>Maesa</i>	—	—	—	511 ⁱ	—	511	511	—	—	—	—	—	—
<i>Magnolia</i>	—	—	—	61	—	294	294	—	—	—	—	—	—
<i>Malcolmia</i> ^b	—	—	—	—	—	491	491	—	—	—	—	—	—
<i>Malus</i>	92 ^e	—	—	—	—	92	92	—	—	—	—	—	—
<i>Malus</i> * #	—	132 ^{f,g,h}	—	—	—	—	—	—	—	—	—	—	—
<i>Mangifera</i>	—	—	284 ⁱ	—	—	—	—	—	—	—	—	—	—
<i>Mamibot</i>	—	—	510	—	510 ^o	510	510	—	—	—	—	—	—
<i>Marah</i>	—	—	—	—	—	148	148	—	—	—	—	—	—
<i>Mazus</i>	320	—	—	—	—	—	—	—	—	—	—	—	—
<i>Medicago</i>	104 ^e	104 ^h	—	—	—	52,104	52,104	—	—	—	—	52,104	104
<i>Medicago</i> *	—	286	286	—	—	—	—	—	286	—	—	—	—
<i>Meineckia</i>	—	—	512	—	—	512	512	—	—	—	—	—	—
<i>Melampodium</i>	—	—	—	—	—	374	374	—	—	—	—	—	—
<i>Melampyrum</i> ^b	—	—	—	—	—	239	239	—	—	—	—	—	—
<i>Mitella</i>	—	—	—	—	—	559	559	—	—	—	—	—	—
<i>Morina</i>	—	—	—	—	—	687	687	—	—	—	—	—	—
<i>Myriophyllum</i>	—	—	—	—	427 ^o	427,443	427,443	—	—	—	—	—	—
<i>Myristica</i>	—	—	—	434	434 ^a	434	434	—	—	—	—	—	—
<i>Narcissus</i>	113	113	—	—	—	—	—	—	—	—	—	—	—
<i>Nerium</i> *	—	—	—	232,233	—	—	231	—	—	—	—	—	—
<i>Nerium</i>	—	—	—	—	—	372	372	—	—	—	—	—	—
<i>Nicotiana</i> *	30	30	—	579	—	—	—	—	—	—	—	—	—
<i>Nicotiana</i> * #	—	—	—	—	—	—	409 ^o	—	409	—	—	409 ^{o,v}	409
<i>Nicotiana</i> ^b	—	—	—	—	—	81,174 ^f	81,407 ^f	—	175	—	—	—	174,175, 176
<i>Nicotiana</i>	647 ^e	362 ^f ;647 ^h	647 ⁱ	289 ⁱ	—	289	289	—	—	—	580	580	580
<i>Nigella</i>	—	—	—	78	—	683	683	—	—	—	—	—	—
<i>Nyctanthes</i>	—	—	—	298 ⁱ	298	298	298	—	—	—	—	—	—
<i>Nyssa</i>	—	—	—	622 ⁱ	—	413,622	413,622	—	—	—	—	—	—
<i>Ochna</i>	—	—	—	—	115 ^o	115	115	—	—	—	—	—	—
<i>Oenothera</i> *	—	—	—	—	448	271;273	272	—	—	—	—	—	—
<i>Oenothera</i> * #	—	—	—	—	—	449	—	—	—	—	—	—	—
<i>Oenothera</i> #	—	—	—	—	—	451	—	—	—	—	—	—	—
<i>Oenothera</i>	—	340 ^h	—	—	—	285,450,530	450	—	—	—	—	—	—
<i>Oenothera</i> ^b	—	—	—	—	—	539,599	—	—	—	—	—	—	—
<i>Oldenlandia</i>	—	—	—	—	—	209,591	209,591	—	—	+	—	—	—
<i>Olea</i> *	—	133	—	—	—	—	—	—	—	—	—	—	—
<i>Ophrys</i>	458	—	—	—	—	—	—	—	—	—	—	—	—
<i>Orchis</i> ^b * #	—	—	—	—	—	529 ^o	—	—	—	—	—	—	—
<i>Orchis</i> *	—	—	—	—	—	531	—	—	—	—	—	—	—
<i>Orchis</i> ^b *	—	—	—	—	—	540	—	—	—	—	—	—	—
<i>Orchis</i> ^b	—	—	—	—	—	—	556	—	—	—	—	—	556
<i>Ornithogalum</i>	—	—	—	708	708	114,708	114,138,708	—	—	—	—	—	—
<i>Ornithogalum</i> * #	635 ^{e,g}	635 ^{f,g,h}	635 ^{i,j}	631 ^k	631 ^p	—	—	—	—	—	—	—	—
<i>Ornithogalum</i> * #	—	—	—	636 ^{k,l,m,n}	637 ^{o,p,q}	—	636;637 ^r	634,637	634,637	634,637	634;636	634 ^{u,v}	634
<i>Ornithogalum</i> #	—	—	—	—	632;633	—	633 ^r	—	—	—	—	—	—
<i>Ornithopus</i>	697 ^e	697 ^h	697 ⁱ	699	699	696,699	696,699	—	—	—	—	—	—
<i>Oryza</i> ^b	—	—	—	—	—	687	—	—	—	—	—	—	—
<i>Oryzopsis</i> ^b	—	—	—	—	387	387	387	—	—	—	—	387	—
<i>Oryzopsis</i>	—	—	—	—	—	392	392	—	—	—	—	—	—
<i>Oxalis</i>	—	—	—	235	—	251	250,251	—	—	—	250	250	250
<i>Pandanus</i>	112	112	112	—	—	112	112	—	—	—	—	—	—
<i>Panicum</i>	—	—	—	—	—	419	419	—	—	—	—	—	—
<i>Papaver</i>	—	—	—	—	—	616	616	—	—	—	—	—	—
<i>Papaver</i> ^b	—	—	—	—	—	710	710	—	—	—	—	—	—
<i>Parnassia</i>	—	—	—	—	—	585	585	—	—	—	—	—	—
<i>Parrotiopsis</i>	—	—	—	—	—	295	295	—	—	—	—	—	295
<i>Paspalum</i> #	—	—	—	109 ^k	—	—	—	110	110	110	—	110 ^o	—
<i>Paspalum</i>	—	—	—	—	—	466,495	466;495	—	—	—	—	—	—
<i>Paspalum</i>	—	—	—	—	—	707	707	—	—	—	—	—	—
<i>Paspalum</i> * #	—	—	—	111 ^k	111	—	—	—	—	—	—	—	—
<i>Pelargonium</i>	704 ^e	704 ^h	704 ⁱ	644	644	644	644	—	—	—	—	—	—
<i>Persea</i> *	574	574	—	—	190	—	—	—	—	—	—	—	—
<i>Persea</i> * #	573 ^e	573 ^h	—	—	—	—	—	—	—	—	—	—	—
<i>Persea</i>	570 ^e	570 ^f ;571 ^h	570 ⁱ ;571 ⁱ	—	—	—	—	—	—	—	—	—	—

Genus ^b	Transmitting Tissue			SPOROPHYTE		Sporophyte/gametophyte		GAMETOPHYTE			Pollen tube/ synergid relationships		
	Stigma	Style	Ovary	Integuments	nucellus	megasporogenesis	megagameteogenesis	anti-podals	egg apparatus	central cell	micropyle	synergids	syngamy
<i>Persea</i>	641*	641*	572,641 ¹	—	—	—	—	—	—	—	572	572	—
<i>Petrophila</i> ^a	666	666	—	—	666 ^{o,p}	666	666	—	—	—	—	666	—
<i>Petunia</i> [*]	424	479 ^q ;553	—	—	—	—	—	—	—	—	—	—	—
<i>Petunia</i> [*]	—	136 ^q ;253 ^h	—	—	—	—	—	—	—	—	—	—	—
<i>Petunia</i>	161*	357 ^h	—	—	—	—	—	—	—	—	—	—	—
<i>Petunia</i>	162*	162 ^q ;358	162 ^l	—	—	—	—	—	—	—	—	—	—
<i>Petunia</i>	—	359,360 ^h	—	—	—	—	—	—	—	654	654	654 ^u	654 ^{u,v}
<i>Petunia</i> [*] #	333,335 ^e	—	—	—	—	—	—	—	653,655	653	—	—	—
<i>Petunia</i> [*] #	252 ^q ;323	252 ^h	—	—	—	—	—	—	355	—	—	355 ^{u,v}	355
<i>Petunia</i> [*] #	331 ^q ;332 ^d	—	—	—	—	—	—	—	652	—	—	652	—
<i>Petunia</i> #	—	254 ^h	—	—	—	—	—	—	356	—	—	356 ^{u,v}	356
<i>Phalaris</i> [*]	257	—	—	—	—	—	—	—	—	—	—	—	—
<i>Phaseolus</i>	—	—	—	—	—	158	158	—	—	—	—	158	—
<i>Phaseolus</i> [*]	691	691	—	—	—	—	—	—	—	—	—	—	—
<i>Phellodendron</i>	—	—	—	—	—	—	—	—	—	—	—	605	605
<i>Phlebophyllum</i>	—	—	—	—	—	45	45	—	—	—	—	—	—
<i>Phoenix</i>	—	—	—	—	—	57	57	—	—	—	—	—	—
<i>Phoenix</i>	365	365	—	58 ^l ;365 ^l	—	58,365	58,365	—	—	—	—	—	—
<i>Phragmites</i>	—	—	—	—	—	—	95	—	—	—	—	—	—
<i>Pistacia</i> #	—	—	—	—	—	242	242	—	—	—	—	—	—
<i>Pisum</i> [*]	—	—	—	—	—	224	—	—	—	—	—	—	—
<i>Pisum</i>	—	—	—	—	700	391,700	—	—	—	—	—	—	—
<i>Plantago</i> [*]	—	—	—	—	—	—	—	—	650,651	—	—	—	—
<i>Platycarpha</i>	—	—	—	7 ^l	—	7	7	—	—	—	—	—	—
<i>Platytheca</i> ^a	—	—	—	49	—	—	—	—	—	—	—	—	—
<i>Plumbago</i> #	—	—	—	—	—	—	—	—	96	—	—	—	—
<i>Plumbago</i> [*] #	—	—	—	—	—	—	—	—	98,547	—	—	—	547
<i>Podostemon</i>	—	—	—	—	—	430	430	—	—	—	—	—	—
<i>Polygonum</i>	—	—	—	—	192 ^q	420	420	—	—	—	—	—	—
					439 ^{o,a}								
<i>Polystachya</i>	—	—	—	—	—	188,618	188,618	—	—	—	—	—	—
<i>Pimpinella</i>	619	619	—	—	—	—	—	—	—	—	—	—	—
<i>Poncirus</i> ^{b,*}	—	—	63	63 ^k	63	—	—	—	—	—	—	—	—
<i>Populus</i>	—	—	—	—	—	215	—	—	—	—	—	—	—
<i>Potentilla</i>	—	—	—	—	—	438	438	—	—	—	—	—	—
<i>Poterium</i>	—	—	—	—	—	472	472	—	—	—	—	—	472
<i>Primula</i>	—	—	—	613	613	613	613	—	—	—	—	—	—
<i>Prinsepia</i>	—	—	582	—	582 ^p	582	582	—	—	—	—	—	—
<i>Proboscidea</i>	—	—	—	—	—	—	404 ^r	—	404	—	—	—	—
<i>Proboscidea</i> [*] #	—	—	—	—	—	—	—	—	405	—	—	405 ^{u,v}	406 ^{u,v}
<i>Prunus</i> [*]	—	131	—	—	—	—	—	—	—	—	—	—	—
<i>Prunus</i> [*] #	134 ^r	—	—	—	—	—	—	—	—	—	—	—	—
<i>Prunus</i>	—	208 ^q ;274 ^h	—	—	—	—	187	—	—	—	—	—	—
<i>Prunus</i>	610 ^r	610 ^h	610	—	—	—	186	—	—	—	—	—	—
<i>Pseudanthemum</i> ^b	—	—	—	—	—	303	303	—	—	—	—	—	—
<i>Pterocarya</i>	—	—	—	247	—	—	—	—	—	—	—	—	—
<i>Putranjiva</i>	—	—	593	593 ^l	—	593	593	—	—	—	—	—	—
<i>Pyrola</i> ^a	—	—	—	627	627	627	627	—	—	—	—	—	—
<i>Quararibea</i>	70	70	70	—	—	—	—	—	—	—	—	—	—
<i>Quercus</i>	—	—	—	—	88 ^o	—	—	88	88	—	—	—	397
<i>Quercus</i> [*] #	—	—	—	400	400	—	400 ^l ;401,402	—	399,402	—	—	399 ^{u,v}	401
<i>Raphanus</i>	155 ^q ;156	—	—	—	—	—	—	—	—	—	—	—	—
<i>Raphanus</i> ^b	589 ^r	—	—	—	—	—	—	—	—	—	—	—	—
<i>Rauvolfia</i> ^a	—	—	—	—	—	368	368	—	—	—	—	—	—
<i>Rhexia</i>	—	—	—	—	—	203	203	—	—	—	—	—	—
<i>Rhinanthus</i>	—	—	—	630 ^l	630 ^o	—	—	—	—	—	—	—	—
<i>Rhododendron</i>	—	—	—	462 ^l	—	462	462	—	—	—	—	462	462
<i>Ribes</i>	—	—	—	—	—	560	560	—	—	—	—	—	—
<i>Rotula</i>	—	—	—	425 ^l	—	425	425	—	—	—	—	—	—
<i>Rubus</i>	191 ^r	191 ^h	—	—	—	688	688	—	—	—	—	—	—
<i>Rudbeckia</i>	—	—	—	—	—	—	324	—	—	—	—	—	—
<i>Ruellia</i>	—	—	—	—	—	302	302	—	—	—	—	—	—
<i>Ruta</i> ^a	—	—	62	62	—	62	62	—	—	—	—	—	—
<i>Saintpaulia</i> [*] #	—	—	—	408 ^l	—	—	408 ^r	—	408	—	—	—	—
<i>Salvadora</i> ^a	—	—	—	—	—	370	370	—	—	—	—	—	—
<i>Salvia</i>	—	—	—	—	—	269	269	—	—	—	—	—	—

ANGIOSPERM REPRODUCTION: BIBLIOGRAPHY AND INDEX

Genus ^b	Transmitting Tissue			SPOROPHYTE		Sporophyte/gametophyte		GAMETOPHYTE			Pollen tube/ synergid relationships		
	Stigma	Style	Ovary	Integu- ments	nucellus	meegasporogenesis	megagameteogenesis	anti- podals	egg apparatus	central cell	micropyle	synergids	syngamy
<i>Sanguisorba</i>	—	—	—	—	—	452	452	—	—	—	—	—	—
<i>Santalum</i>	—	—	—	—	—	461	461	—	—	—	—	—	—
<i>Saxifraga</i>	—	—	—	351	351	25,351	351	—	—	—	—	25	—
<i>Scabiosa</i>	—	—	—	—	—	222	222	—	—	—	—	—	—
<i>Scyphostegia^b</i>	—	—	—	245	—	—	—	—	—	—	—	—	—
<i>Scytopetalum</i>	—	—	—	679 ⁱ	679	679	679	—	—	—	—	—	—
<i>Secale</i>	—	—	—	—	—	154 ^r	—	—	—	—	—	—	—
<i>Secale^b* #</i>	256 ^{c,*}	—	—	—	—	—	—	—	—	—	—	—	—
<i>Sedum</i>	612	612	—	—	—	612	612	—	—	—	—	—	—
<i>Senecio</i>	—	—	—	—	—	15	15	—	—	—	—	—	—
<i>Sesbania</i>	—	—	—	—	—	549	549	—	—	—	—	—	—
<i>Setaria</i>	467 ^d	—	—	—	—	—	—	—	—	—	—	—	—
<i>Silene^b* #</i>	382 ^{d,*}	—	—	—	—	—	—	—	—	—	—	—	—
<i>Sisyrinchium</i>	—	—	—	—	—	345	345	—	—	—	—	—	—
<i>Smelowskia</i>	—	—	—	—	—	238	238	—	—	—	—	—	—
<i>Solanum</i>	—	—	—	119 ⁱ	—	119,412	119,412	—	—	—	—	—	—
<i>Solanum</i>	—	—	—	561 ⁱ	—	561	542,561	—	—	—	—	—	—
<i>Solidago^b</i>	—	—	—	—	—	493,598	493,598	—	—	—	—	—	—
<i>Sonchus</i>	—	—	—	307 ⁱ	307	307	307	—	—	—	—	—	—
<i>Sophora</i>	—	—	—	—	—	325	325	—	—	—	—	—	—
<i>Sparganium</i>	—	—	—	17 ^a	—	17	17	—	—	—	—	—	—
<i>Spatuloglottis</i>	—	—	—	—	—	487	487	—	—	—	—	—	—
<i>Spilanthes</i>	—	—	—	500 ⁱ	—	500	500	—	—	—	—	—	—
<i>Spinacia</i>	—	—	—	—	—	—	—	—	—	—	505	—	—
<i>Spinacia[*]</i>	694 ^a	694 ^b	—	—	—	—	—	—	—	—	—	—	—
<i>Spinacia[*] #</i>	—	695 ^a	—	—	—	—	—	—	—	—	—	—	—
<i>Spiranthes</i>	—	—	—	—	—	—	626	—	—	—	—	—	626
<i>Spirodela</i>	—	—	—	327	327	—	—	—	—	—	—	—	—
<i>Spironema</i>	645	—	—	—	—	—	—	—	—	—	—	—	—
<i>Stellaria</i>	—	—	—	—	—	459,460	459,460	—	—	—	—	—	—
<i>Stipa</i>	—	—	—	383,386	383	383,386	383,386	386	386	—	—	383,386 ^a	386
<i>Stipa[*] #</i>	—	—	—	—	—	—	388	—	—	—	—	388 ^{a,*}	388
<i>Strelitzia</i>	—	—	—	676	—	—	—	—	—	—	—	—	—
<i>Stypandra</i>	—	—	—	—	—	103	103	—	—	—	—	—	—
<i>Suaeda</i>	—	—	—	—	—	375	375	—	—	—	—	—	—
<i>Suertia^a</i>	—	—	—	—	—	371	371	—	—	—	—	—	371
<i>Synedrella</i>	—	—	—	498 ⁱ	—	498	498	—	—	—	—	—	—
<i>Tacsonia^a</i>	—	—	—	—	—	150	150	—	—	—	—	—	—
<i>Tamarix</i>	—	—	—	—	—	—	258	—	—	—	—	—	—
<i>Taraxacum</i>	—	—	—	377 ⁱ	—	—	377	—	—	—	—	—	377,481
<i>Tephrosia</i>	—	673 ^h	—	—	—	—	—	—	—	—	—	—	—
<i>Thalassia^a*</i>	470	—	—	—	—	—	—	—	—	—	—	—	—
<i>Thalassia^a*</i>	471 ^a	—	—	—	—	—	—	—	—	—	—	—	—
<i>Theligonum</i>	—	—	—	—	—	297	297	—	—	—	—	—	—
<i>Thunbergia</i>	—	—	—	—	317 ^o	317	317	—	—	—	—	—	—
<i>Tieghemopanax</i>	—	—	—	—	—	414	414	—	—	—	—	—	—
<i>Tillandsia[*] #</i>	—	—	82	—	—	—	—	—	—	—	—	—	—
<i>Tofieldia</i>	—	—	—	—	—	602	602	—	—	—	—	478 ^{a,*}	—
<i>Torenia[*] #</i>	—	—	—	—	—	—	—	—	—	—	—	—	—
<i>Tradescantia[*]</i>	453	—	—	—	—	—	—	—	—	—	—	—	—
<i>Trapa</i>	—	—	—	—	—	643	643	—	—	—	—	—	—
<i>Trichodesma</i>	—	—	—	—	—	212	212	—	—	—	—	—	—
<i>Trichosanthes</i>	—	—	—	—	—	146	146	—	—	—	—	—	—
<i>Trifolium</i>	—	55 ^a	—	—	—	50,53	50,53,55	—	—	—	—	—	—
<i>Trifolium</i>	—	—	—	—	—	54,313,336	313,336	—	—	—	—	—	313
<i>Trifolium[*]</i>	—	—	—	519	519	519	519	—	—	—	—	—	—
<i>Tripetaleia</i>	—	—	—	703	703	703	703	—	—	—	—	—	—
<i>Tristicha^b</i>	—	—	—	267 ⁱ	267 ^o	267	267	—	—	—	—	—	—
<i>Triticum</i>	18,22 ^a	18,22 ^h	—	18	—	—	—	—	—	—	—	21,22 ^r	21,22
<i>Triticum</i>	107,545 ^c	107,545 ^f	107 ⁱ	—	—	37 ^r	37	44	44	44	44	37,44	37,44
<i>Triticum^b</i>	347 ^a	347 ^h	347 ⁱ	—	—	36 ^r	698	—	—	—	—	—	698
<i>Tulipa</i>	—	—	—	—	—	207 ^r	207	—	—	—	—	—	469
<i>Turnera</i>	—	—	—	681	681 ^o	681	681	—	—	—	—	—	—
<i>Typha</i>	—	—	—	16 ^k	—	16	16	—	—	—	—	—	—
<i>Ulmus^b</i>	—	—	—	—	—	259	259	—	—	—	—	—	—
<i>Ursinia</i>	—	—	—	4 ⁱ	—	4	4	4	4	—	—	—	—
<i>Utricularia</i>	—	—	—	502 ⁱ	—	210,502	210,502	—	—	—	—	210 ^a	—

Genus ^b	Transmitting Tissue			SPORO PHYTE		Sporophyte/gametophyte		GAMETOPHYTE			Pollen tube/ synergid relationships		
	Stigma	Style	Ovary	Integuments	nucellus	megasporogenesis	megagameteogenesis	anipodals	egg apparatus	central cell	micropyle	synergids	syngamy
<i>Utricularia</i>	—	—	—	588 ¹ ,590 ¹	—	588,590	588,590	—	—	—	—	—	—
<i>Vaccinium</i>	—	—	—	422 ¹ ,611 ¹	—	422,611,671	422,611,671	—	—	—	—	—	—
<i>Veratrum</i>	—	—	—	—	—	601	600,601	—	—	—	—	—	—
<i>Verbena</i>	—	—	—	—	—	292	292	—	—	—	—	—	292
<i>Veronica</i>	—	—	—	9 ¹	—	9	9	—	—	—	—	—	—
<i>Vicia</i>	—	—	—	—	—	396	—	—	—	—	—	—	—
<i>Vinca</i>	—	—	—	—	—	171	171	—	—	—	—	—	—
<i>Vitis</i>	93,126 ^d	126 ^e	—	—	—	—	93	—	—	—	—	—	—
<i>Willisia</i>	—	—	—	—	—	13	13	—	—	—	—	—	—
<i>Wisteria</i>	—	—	—	—	—	517	517	—	—	—	—	—	—
<i>Zea</i>	—	3 ¹ 71,264 ¹	—	71	—	—	—	—	—	—	—	—	354
<i>Zea</i> [*]	—	—	—	—	—	546	546	—	—	—	—	—	—
<i>Zea</i> ^b	72,288 ^c	72,288	—	—	—	—	—	—	—	—	—	—	—
<i>Zea</i> [#]	—	—	—	—	—	403 ^c	166	—	—	—	—	165	—
<i>Zephyranthes</i> ^b	—	—	—	—	—	—	378	—	—	—	—	—	—
<i>Zizania</i>	—	—	—	—	—	189	189	—	—	—	—	—	—
<i>Zornia</i>	—	—	—	—	—	159	159	—	—	—	—	—	—

^aas defined by Tilton and Horner (1980)

^bprincipal genus; other genera described in addition to this one

^csecretion of stigmal exudate

^dcharacterization of stigmal exudate

^epollen tube/stigma interactions

^fsecretion of stylar exudate

^gcharacterization of stylar exudate

^hpollen tube/stylar interactions

ⁱsecretion of exudate

^jpollen tube/ovarian interactions

^kmicropyle

^lintegumentary tapetum

^mfuniculus

ⁿvasculature

^ohypostase or other modifications to chalazal end

^pnucellar cap or other modifications to micropylar end

^qvasculature

^rparietal cells

^smeiotic processes

^tmegagametophyte nutrition

^upollen tube attraction and/or guidance

^vpollen tube discharge

^wincludes electron microscopy

^xincludes functional interpretations

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