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About the Institute

The Hunt Institute for Botanical Documentation, a research division of Carnegie Mellon University, specializes in the history of botany and all aspects of plant science and serves the international scientific community through research and documentation. To this end, the Institute acquires and maintains authoritative collections of books, plant images, manuscripts, portraits and data files, and provides publications and other modes of information service. The Institute meets the reference needs of botanists, biologists, historians, conservationists, librarians, bibliographers and the public at large, especially those concerned with any aspect of the North American flora.

Hunt Institute was dedicated in 1961 as the Rachel McMasters Miller Hunt Botanical Library, an international center for bibliographical research and service in the interests of botany and horticulture, as well as a center for the study of all aspects of the history of the plant sciences. By 1971 the Library's activities had so diversified that the name was changed to Hunt Institute for Botanical Documentation. Growth in collections and research projects led to the establishment of four programmatic departments: Archives, Art, Bibliography and the Library.

Definitions of Hairiness and Toothing of leaves

- arechnoid : entanglement of fine whitish hairs (Jackson)
cobwebby: slender entangled hairs (Gray, 7th ed.)
- pilose: any kind of hairiness, usually meaning soft and distinct hairs (J)
hairy: especially with soft hairs (G)
- puberulent: slightly hairy (J)
minutely pubescent (G)
- pubescent: (pubescence- hairiness): clothed with soft hair or down (J)
covered, especially with short, soft, and downy hairs (G)
- sericeous : silky, with close-pressed soft straight pubescence (J)
silky, clothed with satiny pubescence (Gr. Handb)
- tomentose: densely pubescent with matted wool or short hairs (J)
" " " " " (G)
- tomentulose : slightly tomentose (J)
not in Gray
- strigose : with appressed, straight, stiff hairs (hispid) (J)
" " , sharp, " " " (G)
- villose, villous (shaggy): coating of long, weak hairs (J)
" " " soft, " (G)
- antrorse: directed upwards (forwards) (J)
not in Gray
- retorse : directed downwards or backwards (J)
" " " back (G)
- salient: projecting forward (J): not in Gray.
- crenate : crena: a rounded tooth or notch.
(rounded tooth or notch), scalloped-toothed (J)
dentate, with teeth rounded (G)
- cremulate : toothings small (J)
finely crenate (G)
- dentate: toothed, especially salient, projecting forward (J)
" , usually teeth directed outward (G)
- denticulate : minutely toothed (J)
minutely dentate (G)
- serrate : with antrorse teeth on the margin (J)
with sharp teeth pointing forward (G)
- serrulate: slightly toothed, denticulate (J)
finely serrate (G)
- undulate: wavy (J); wavy, repand (G)
- spinulose: with small spines or spinules (J); spinule: a little spine (G)



U. S. DEPARTMENT OF AGRICULTURE
OFFICE OF INFORMATION
PRESS SERVICE



WASHINGTON D C
AGRICULTURAL ADJUSTMENT ADMINISTRATION

RELEASE: WHEN READING OF STATEMENT HAS BEGUN, January 29, 1934.
BUT NOT BEFORE 1:15 P. M.

SECRETARY WALLACE OUTLINES PROGRAMS
FOR DAIRY AND BEEF INDUSTRIES

A plan for emergency aid for the dairy and beef cattle industries, provided by \$200,000,000 over and above the processing taxes available for the current year was offered by Secretary Henry A. Wallace at a conference of spokesmen for the two industries with members of Congress at the Capitol today.

Secretary Wallace said that because the effect of processing taxes on producers' prices tends to disappear as oversupply is removed and consumer purchasing power recovers, the \$200,000,000 authorization should be accompanied by a proviso that the money be repaid later out of processing tax receipts.

Mr. Wallace outlined a 250 million dollar program to be offered the dairy industry from proceeds of the processing tax and the emergency fund, and asserted that the Agricultural Adjustment Administration will be prepared to follow up with assistance to the beef cattle industry after beef cattle are designated by amendment as a basic commodity in the Act.

TREATMENT OF SALIX IN BRITTON & BROWN ILLUSTRATED FLORA Ed. 3.

AREA: Canada south of the St. Lawrence River (including* Cape Breton and Prince Edward Ids. but excluding Anticosti Id. and Newfoundland.

North of the St. Lawrence to Lat. 48° N, which starts just below mouth of the Saguenay R. in Quebec and runs west across Ont. and northern Lake Superior (Isle Royale) to the mouth of Pigeon R., boundary between Minn. and Ont. no of the Lake.

West to west line of Minnesota, Iowa, and Missouri.

South to include Mo., Ky., and Va. Lat. $36^{\circ} 30'$ plus.

Lat. 48° N. is about $2/5$ of distance from Lake Huron to James Bay and equals north line of New Brunswick

MATERIAL:

Generic description

Keys to the species, vegeta~~t~~ and floral, if needed

Descriptions of species averaging 10 typed lines each, followed by

Habitat, distribution, and current synonyms

Varieties, if clear and well marked.

ILLUSTRATIONS: are all at top of page, or on an opposite page.

No figure number is to be given. Good botanical artist available

Space given to descriptions and illustrations can be varied, relatively

Hope to average 4 species per page, with illustration, where no varieties

include chief diagnostic characters, artists draw from selected material.

AUTHOR RESPONSIBILITY:

Sequences of Sections; sequence of species.

Inclusion of varieties, and of supplementary species (foreign or doubtful (expected)

Use International Code for names

No citation of publication unless very recent.

Use normal technical terms (reniform, semi-lunate, etc)

Use metric system of measurements

DISTRIBUTION:

" Nf. and Que. to Alta., s. to N.J. and n. Ind. and along the mountains and coastal plain to S.C. and Ala."

ABBREVIATIONS:

Canada: Nf., N.S., N.B., Lab., Que., Ont., Man., Alta., Sask., B.C. All others in full U.S. Standard for States.

Directions: n., e., s., w., ne., nw., se., sw., central, n.-cent (?)

SYNONYMS:

Only those synonyms are given which represent names used in B. & B. Illus. Fl. Ed 2,

Gray Man., Rydb. Fl. Fr. & Fl., and Small Man.

Enter them thus: [*S. longifolia*, Gray], after distribution

454 B 77				
Species and Varieties to be Included or Considered	B. & B. Illus. : Flora. Ed. 2. '13	Gray Manual. : Ed. 7. 1908	Rydb. Fl. Pls. : 1917/1932	Small, Manual : S.E. 19
1 S. lucida Muhl. Q. var. angustifolia And. b. var. intonsa Fernald	✓ S. lucida	✓ S. lucida ✓ v. intonsa	S. lucida (~~S. erythrocoma~~ in pt.)	Sym OK 576 596
2 S. serissima (Bailey) Fernald S. pentandra L. (supplementary)	✓ S. serissima ✓ S. pentandra	✓ S. serissima ✓ S. pentandra	S. serissima	OK OK
3 S. fragilis L.	✓ S. fragilis	S. fragilis	S. fragilis L.	OK OK
4 S. alba L. var. celva (argentea)	✓ S. alba L.	✓ S. alba L. v. vitellina v. ciliarulea	S. alba L.	OK OK
5 S. babylonica L.	✓ S. Babylonica	✓ S. babylonica		OK
7 S. amygdaloides And.	✓ S. amygdaloides	✓ S. amygdaloides	S. amygdaloides	OK
6 S. longipes var. Wardii (Bebb) Schneider (S. Harbisonii Schneider) exclude	✓ S. Wardii	✓ S. Wardii	S. wardii S. longipes in pt. (in S. nigra & S. marginata)	OK OK
8 S. nigra Marshall (var. falcata, exclude)	✓ S. nigra OK	✓ S. nigra ✓ v. falcata	S. nigra S. nigra S. marginata	OK
9 S. interior Rowlee var. pedicellata (Anders.) Ball var. Wheeleri Rowlee	✓ S. interior ✓ S. Wheeleri (Row) Ryd.	✓ S. longifolia ✓ S. cordata v. myricoides	S. interior S. linearifolia S. Wheeleri (Row) Ryd. S. cordata S. missouriensis S. ligulifolia	OK OK OK
10 S. cordata Muhl. var. angustata Andersson var. myricoides var. vestita Andersson	✓ S. cordata S. cordata in pt.	✓ S. cordata ✓ S. missouriensis?	S. cordata S. cordata S. cordata	OK
11 S. myrtillofolia Andersson var. brachypoda Fernald (S. saturata)	✓ S. pyrifolia	✓ S. balsamifera	S. pedunculata in pt. S. pyrifolia	OK OK
12 S. pyrifolia Andersson				

✓ 145 cordata Mx
(S. adenophylla Hooker)
a var. ~~abasa~~ ~~Arnold~~

✓ S. adenophylla ✓ S. syrticola
✓ S. glaucophylla ✓ S. ~~glaucophylla~~
v. angustifolia Bebb
v. brevifolia Bebb

— S. Barclayi Andersson (P.Q.)

✓ S. Barclayi (33)

✓ 13 S. glaucophylloides ~~Andersson~~ Fernald

✓ X S. laurentiana Fernald

✓ 15 S. calcicola Fern. Wiley.

[S. calcicola (sup) (sub)
"boreal spp." 30]

OK

— S. reticulata L.

✓ S. reticulata (31)

✓ 17 S. vestita Pursh
— a var. erecta

✓ S. vestita (32)

~~S. Fernaldii~~

OK

✓ 16 S. pedicellaris Pursh
S. chlorophylla Fernald
S. fuscescens Andersson

✓ S. pedicellaris (sub)
S. ~~pedicellaris~~ S. pedicellaris
S. fuscescens (sup) (sub)
(Mt. Albert, P.Q.)

(= S. herbacea) OK

✓ 18 S. herbacea L.

✓ S. herbacea L. ✓ S. herbacea

✓ 19 S. uva-ursi Pursh

✓ S. uva-ursi (37) ✓ S. uva-ursi

✓ 22 S. anglorum Chamisso
var. antiplasta Schneider
var. araioclada Schneider
var. kophophylla Schneider
(2) S. arctophila Willd.
S. arctica Pallas

✓ S. anglorum (but no dist. in cat. range)
(39)

✓ S. grossularifolia (sub 37)
✓ S. arctica (35) not in det. P. Sanger

OK
OK

23 S. brachycarpa Nuttall
var. antimima (Schn.) Raup
var. Sansoni Ball

✓ [S. brachycarpa (sup)
(sub 37)

S. brachycarpa

OK

— S. desertorum Richardson

✓ S. desertorum (37)

~~S. desertorum (Gaspé)~~

= S. br. var. antimima

OK

20 S. chlorolepis Fernald (

✓ S. chlorolepis (Gaspé) (30)

OK

24 S. cordifolia Pursh

✓ S. Waghornei (36) not

a. var. callicarpaea (T.) Fern
c. var. Macounii Rydb. (Schn.)
b. var. ~~intensa~~ Fern.

✓ S. callicarpaea (sub 35)
✓ S. Macounii (sup) sub 39

OK

OK

OK

— S. glauca L.

✓ S. glauca L. (S. glauca) (38)

* S. fuscescens (sub S. pedicellaris) = S. herbacea = X

		Illus Fl.	Gray	Rydb. Fl. PT. & R.	Small	Sign.
27	<i>S. argyrocarpa</i> Andersson	<i>S. argyrocarpa</i> (147) ✓	<i>S. argyrocarpa</i>	<i>S. argyrocarpa</i>		OK
33	<i>S. coactilis</i> Fernald	✓	<i>S. coactilis</i>			OK
28	<i>S. pellita</i> Andersson	✓ <i>S. pellita</i> (18) ✓	<i>S. pellita</i>	<i>S. pellita</i>		OK
35	<i>S. petiolaris</i> J.E. Smith (var. <i>gracilis</i> Anders.) <i>var. angustifolia</i> And.	✓ <i>S. petiolaris</i> (20) ✓	<i>S. petiolaris</i>	<i>S. petiolaris</i> ~~<i>S. gracilis</i>~~	<i>S. petiolaris</i>	OK
32	<i>S. sericea</i> Marshall	✓ <i>S. sericea</i> (19) ✓	<i>S. sericea</i>	<i>S. sericea</i>	<i>S. sericea</i>	OK
34	<i>S. subsericea</i> (Anders.) Schm.	✓ <i>S. subsericea</i> ✓	<i>S. subsericea</i>	<i>S. pet</i> X <i>S. sericea</i>		OK
40	<i>S. purpurea</i> L.	✓ <i>S. purpurea</i> (15) ✓	<i>S. purpurea</i>		<i>S. purpurea</i>	OK
29	<i>S. viminalis</i> L.	✓ <i>S. viminalis</i> (16) ✓	<i>S. viminalis</i>			OK
30	<i>S. planifolia</i> Pursh var. <i>Nelsonii</i> Ball (not in range)	✓ <i>S. phyllcifolia</i> (157) ✓	<i>S. phyllcifolia</i>	<i>S. planifolia</i> ~~<i>S. phyllcifolia</i>~~ <i>S. Nelsonii</i>		OK
31	<i>S. pedunculata</i> Fernald					OK
25	<i>S. candida</i> Fluegge var. <i>denudata</i> Andersson	✓ <i>S. candida</i> (17) ✓	<i>S. candida</i> v. <i>denudata</i>	<i>S. candida</i>		OK
26	<i>S. cryptodonta</i> Fernald					OK
36	<i>S. discolor</i> Muhl. var. <i>stribocephala</i> (K.) And. var. <i>Overi</i> Ball var. <i>prinoides</i> (Ph.) Anderss.	✓ <i>S. discolor</i> (22) ✓ ~~<i>S. discolor</i>~~ ✓ <i>S. discolor</i> (23) ✓	<i>S. discolor</i> v. <i>stribocephala</i> v. <i>prinoides</i>	<i>S. prinoides</i> <i>S. discolor</i> <i>S. stribocephala</i>	<i>S. discolor</i>	OK
37	<i>S. humilis</i> Marshall var. <i>rigidiuscula</i> (And.) R. & F. var. <i>keeweenawensis</i> Farwell	✓ <i>S. humilis</i> (23) ✓	<i>S. humilis</i> v. <i>rigidiuscula</i>	<i>S. humilis</i>	<i>S. humilis</i>	OK
38	<i>S. tristis</i> Aiton	✓ <i>S. tristis</i> (24) ✓	<i>S. tristis</i>	<i>S. tristis</i>	<i>S. tristis</i>	OK
39	<i>S. Bebbiana</i> Sargent var. <i>capreifolia</i> Fernald var. <i>luxurians</i> Fernald var. <i>perrostrata</i> (Rydb.) Schm. (not in range) var. <i>projecta</i> Fernald	✓ <i>S. Bebbiana</i> (25) ✓	<i>S. rostrata</i>	<i>S. Bebbiana</i>		OK
	<i>S. obtusata</i> Fernald = = <i>S. myrtilloides</i> v. <i>brachypoda</i>	✓ <i>S. obtusata</i> (26)		<i>S. perrostrata</i>		OK

* *S. discolor* has
S. Laurentiana as syn.

Ed. 1

Britton & Br. Illus Flom 1896

<u>Species</u>	<u>Varieties</u>	<u>Action</u>	<u>Additions</u>
1. <i>S. nigra</i>	<i>falcata</i>	~~Return~~ delete	
2. <i>Wardii</i> (Bt.) Lk. (2-32)		var. <i>g. longipes</i>	
3. <i>S. amygdaloides</i> (11-12)		~~Return~~	
4. <i>S. lucida</i>		~~Return~~	
5. <i>S. fragilis</i>	<i>decipiens</i>		var. <i>angustata</i> <i>intonsa</i>
6. <i>S. alba</i>	<i>caerulea</i> <i>reticulata</i>		
7. <i>S. Babylonica</i>			
8. <i>S. purpurea</i>			
9. <i>S. fluviatilis</i> Nutt		rename <i>reticulata</i>	
10. <i>S. reticulata</i> L.		{ ~~return~~ Lamund longer	var. <i>pedunculata</i>
11. <i>S. vestita</i> Rh		~~return~~	
12. <i>S. Bebbiana</i> Eng		~~return~~	var. <i>p.</i> var
13. <i>S. humilis</i>			
14. <i>S. tristis</i>			
15. <i>S. discolor</i>	<i>primoides</i>		
16. <i>S. sericea</i> M.			<i>S. subsericea</i> <i>S.</i> <i>S. arbusculoides</i> <i>S. pellita</i>
17. <i>S. petiolaris</i>			
18. <i>S. argyrocarpa</i>			

19. *S. desertorum*
20 *S. glauca* L.

21 *S. candida*

22 *S. vinimalis*

23 *S. phyllifolia*

24 *S. Brownii* Bb

25 *S. arctica* Pall

26 *S. cordata*

27 *S. glaucophylla* ^{*v. angustata*} ^{*blackiana*}

28 *S. mussonianis*

29 *S. falsomajus*

30 *S. Bonlayi*

31 *S. adnigphylla*

32 *S. myrtelloides*

33 *S. uva-ursi*

34 *S. herbacea*

S. maccalliana
cordifolia var

S. chlorolepis

S. brachycarpa

S. apiculata
v. samsonii
var *denudata*

S. cryptodonta

S. planifolia Th.

S. anglorum

var.

delete

S. arctophila

var
glaucophyllodes
laurentiana

latiuscula delete
delete

S. calcicola

v. pedicellaris = *Red. hypole*

454. B77 / Britton & Brown, Illus. Flora Ed. 2, 1913

<u>Species</u>	<u>Varieties</u>	<u>Action</u>	<u>Additions to be made</u>
1. <i>S. nigra</i>		Retain	
2. <i>S. amygdaloides</i>		"	
3. <i>S. Wardii</i>		<i>S. caroliniana</i> Mx.	
4. <i>S. lucida</i>			var. <i>angustifolia</i>
5. <i>S. serissima</i>		Retain	" <i>interced</i>
6. <i>S. fragilis</i>		"	
<i>S. pentandra</i>		"	
7. <i>S. exigua</i>			var. <i>lutescens</i>
8. <i>S. interior</i>		Retain	var. <i>pedunculata</i>
9. <i>S. alba</i>		"	
10. <i>S. babylonica</i>		"	
11. <i>S. physifolia</i>		"	
12. <i>S. glaucophylla</i>		"	
13. <i>S. cordata</i>		"	{ var. <i>bracteifolia</i>
<i>S. mackenziana</i>			{ " <i>albosticta</i>
<i>S. lutea</i>			
14. <i>S. adenophylla</i>		<i>S. cordata</i> Mx.	
15. <i>S. purpurea</i>		"	
16. <i>S. viminalis</i>		"	

B-B Illus Fl. Ed 2, 1913.

- 31 *S. reticulata* L.
32 *S. vestita*
33 *S. Barclayi*
34 *argyrocarpa*
35 *S. arctica*
S. callicarpaea
37 *S. desertorum*
S. brachycarpa
38 *S. glauca*
39 *S. angustum*
S. inaequalis
S. groenlandica

Relain

"

var *erecta*

Relain

= *arctophila*?

S. cordifolia var

?

delata

Relain

Britton Manual, 1901, 1905, (454. B77m)

S

3

17 *S. candida*18 *S. pellita*19 *S. sericea**S. subsericea*20 *S. petiolaris*21 *S. Bebbiana**S. permostrata*22 *S. discolor*23 *S. squamata*24 *S. humilis*25 *S. tristis*26 *S. obtusata*27 *S. uva-ursi**S. myrtillofolia*28 *S. herbacea*29 *S. pedicellaris**S. fuscus*30 *S. chlorolepis**S. calcicola*

retain

"

"

full species

retain

omit

retain

syn

retain

retain

v. demodata

{ "

vars

vars

= *S. myrtillofolia*var. *brachypoda*

retain

retain

retain

retain

delete

retain

retain

v. hypoglausa

WILLOWS IN HYDERABAD, FLORA OF THE PRAIRIES AND PLAINS OF THE NORTH AMERICA. 1932.

(pp. 246-256).

454. R 97

N.D. - Man.

- ✓ 1. *S. nigra* Marshall. N.D. - Man.
- syn 2. *S. Wardii* Babb. Mi. - Va. - Kan.
- ✓ 3. *S. amygdaloides* Andersson. Que. - N.Y. - Wreg. - B.C.
- 4. *S. erythrocoma* Barr. Lvs. 3-5 cm. long, oblanc. (no color given) Man - B.C., Mack.
- ✓ 5. *S. serissima* (Bailey) Fern. Mass. - N.J. - S.D. - Sask.
- ✓ 6. *S. S. lucida* Muhl. Mfd. - Ky. - Alta.
- 7. *S. Fendleriana* (*S. lasiandra* var. *caudata*) B.C. - Alta. - S.D. - N.M. - Calif.
- ✓ 8. *S. fragilis* L.
- ✓ 9. *S. alba* L.
- 10. *S. exigua* Nutt. (*S. lutescens* Rydb.) Sask. - B.C. - Minn. - Okla. - Oreg.
- ✓ 11. *S. interior* Rowlee. Sask.
- syn 12. *S. linearifolia* Rydb. (*S. rubra* Rich., *S. tenerrima* (Howell) (sic) Heller.) Man. - Wash. ✓
- syn 13. *S. Wheeleri* (Rowl.) Rydb. (*S. interior* Wheeleri Rowl.) N.E. - Ida. ✓
- ✓ 14. *S. pyrifolia* Anderss. (Lab. - Minn. - Mont. ✓
- 15. *S. mackenziana* Barr. Man. - Sask. - Mack. - B.C. - Ida. - Calif.
- ✓ 16. *S. cordata* Muhl. (= *S. rigida*) N.B. - B.C., Va. - Colo. - Calif. ✓
- syn 17. *S. missouriensis* Babb. Minn. - S.D. - Mo. - Nbr. - Okla. ✓
- ✓ 18. *S. pedicellaris* Ph. (no leaf color given; incl. in *Cordatae*) N.E. - Wash. - B.C. ✓
- 19. *S. lutea* Nutt. Man. - Alta. - Nebr. - Utah - Mont.
- ✓ 20. *S. petiolaris* Smith. N.B. - Sask., Tenn. - Ill. - S.D.
- 21. *S. Geyeriana* Anderss. B.C. - Mont., S.D. - Colo. - Oreg.
- syn 22. *S. gracilis* Anders. (*S. rosmarinifolia* Hook.) Sask. - Wisc. - Ia.
- ✓ 23. *S. humilis* Marshall. Mfd. - N.D., Ga. - Okla.
- ✓ 24. *S. tristis* Aiton. N.S. - N.D., Fla. - Tenn.
- ✓ 25. *S. discolor* Muhl. N.S. - S.D. - Sask., Del. - Mo.
- syn 26. *S. prinoides* Pursh. N.Y. - Va. - S.D.
- syn 27. *S. eriocephala* Michaux. Mass. - Pa. - Ia.
- 28. *S. perrostata* Rydb. Huds. Bay - Alaska, Nebr. - Colo. - Utah
- ✓ 29. *S. Bebbiana* Sargent. Anticosti - B.C., N.J. - N.M. - Ariz. - Calif.
- 30. *S. Scouleriana* Barr. Sask. - Yukon, S.D. - N.M. - Calif.
- ✓ 31. *S. candida* Fluegge. Lab. - Alta., N.J. - Colo. - Ida.
- ✓ 32. *S. argyrocampa* Anderss. Mtns. & hills, Lab. - N.H. - Mack.
- ✓ 33. *S. sericea* Marshall. Me. - Va. - Ia.
- 34. *S. arbusculoides* Anderss. Huds. Bay - Alaska - Canad. Rockies.
- syn (S. subsericea is entered as "S. petiolaris x S. sericea (S. pet. subsericea And) NY - Ia
- ✓ 35. *S. pellita* Anders. River banks, Mfd. - Que. - Sask. - Alta. - Me.
- ✓ 36. *S. brachycarpa* Nutt. (wet pl. in mts.) Que. - Man. - Alta. - B.C., Colo.

dupl in Rydb.

37. *S. nudescens* Rydberg. (*S. glaucoeps galbrescens* Anders.) Mts. S.D.-Alta. Wyo.-B.C.-
("capsule 6-8 mm. long; style nearly 1 mm. long") (p. 255) Yukon.

38. *S. glaucoeps* Andersson. Alta.-N.M.-Utah.-Calif.-Yukon.
("capsules 5 mm. long; styles 0.5 mm. long")

39. *S. Nelsoni* Ball. S.D.-Colo.-Utah.-Alta.

✓ 40. *S. planifolia* Pursh. Lab.-N.H.-N.N.-Utah-Alaska.

OVER

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Dioecious shrubs or trees, with bitter bark and light wood; leaves single, alternate, petioled, sometimes stipulate, deciduous; flowers of each sex in aments (catkins); aments ^Cprecocious, coetaneous, or rarely serotinous, falling off as units; flowers single, each subtended by a flower scale; fruit a rostrate-lanceolate to ovoid, 1-celled, sessile to pedicelled, 2-4-valved capsule; style one or obsolete; stigma 2-4, entire or divided; seeds numerous, minute, linear-oblong, with a tuft of long hairs at base (for air dispersal). Two genera: Populus (aspens and poplars, or cottonwoods) and Salix (willows or osiers).

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X Bidscaler several; flower disk cup-shaped; flower scales lacinate or fimbriate; stamens 8-40 or 60, or more. Populus.

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X Bidscaler one; flower disk none; flower scales mostly entire, rarely retuse or shallowly toothed; stamens 2 (rarely united) or 3-5 or 7. Salix.

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POPULUS L. sp. Pl. 1034. 1753.

Bid-scales several, imbricated, resinous; aments elongated, precocious, mostly penulous, solitary (?); flower scales lacinate to fimbriate, narrowed at base; flowers borne on a cup-shaped, oblique, entire or lobed disk; stamens 8-30 or 60, or more, filaments free; capsules sessile to pedicelled, 2-4-valved; styles almost none; stigma 2-4, sometimes narrowly to broadly lobed.

Trees with broadly lanceolate to mostly cordate-ovate or suborbicular leaves; petioles mostly long; stipules minute, fugacious. About 25 or 30 species, in the temperate portions of the northern hemisphere.

(Hase ancient, used by Pliny for these trees).

SALIX [Tourn.], L. Sp. Pl. 1015. 1753.

Bud-scales single, non-resinous, with an adherent inner membrane; aments short to long, mostly erect to spreading, solitary (or 2-3 together in Section Longifoliae); precocious, coetaneous, or rarely serotinous, flower scales mostly entire, sometimes ^{see glands, below,} erose or shallowly toothed at apex; flower disk none ^{but usually a small} ventral gland, or rarely (staminate) both ventral and dorsal; stamens 2 (~~rarely united~~) or 3-5 or 7; filaments ~~free~~ mostly free, or sometimes united at base (in a few species with two stamens, the filaments completely united); capsules 2-valved, mostly sessile or ~~short-pedicelled~~, ^{id} rarely long-pedicelled; styles none to 2-3 mm. long, entire or somewhat ^{1d} diverged apically; stigmas 2, minute to 1 mm. long, entire to variously notched, cleft, or divided; gland 1 and ventral, ^{to the flower,} or sometimes a second (dorsal) ^{with flowers} in staminate aments, short and broad to slender, elongated, capitate.

Some 300 or more extremely diverse species, mostly in the northern hemisphere, and more than 100 in North America. Trees ^{and} ~~to~~ erect and mostly tall shrubs in warm-temperate areas, small trees ~~in~~ tall erect to low ^{and} ascending shrubs in cool-temperate areas, and erect to depressed or prostrate and often creeping shrubs in alpine and arctic areas. Leaves of every shape: linear, lanceolate, oblong, oblanceolate, elliptical, oval, ovate, obovate, orbicular, ^{to} and oblate-orbicular and retuse at both ends, ^(and all combinations of these) and of every length from 0.5 cm. to 34 cm. (Name ancient, from same root as ^{willows} ~~sallow~~ (willow), which occurs in all mediaeval languages, widely used throughout the world, by primitive and modern man, for many and varied purposes).