

cultivation, Cols., *Waller & J. H. Schaffner*). Not treated by Braun (1967). *Iris germanica* L. (Common Iris, a European cultigen). Not mentioned for Franklin Co. by Braun 1967:401.

- a Flowering stems usually not more than 15 cm tall, from superficial rhizomes; sepals not bearded, with 3-ridged, toothed, orange-white crest; perianth blue or violet, rarely white. 1. *I. cristata*
- a' Flowering stems taller than 15 cm, from usually deep rhizomes.
 - b Sepals bearded. *I. germanica* L., Common I.
 - b' Sepals not bearded.
 - c Perianth yellow; petals much shorter than sepals. 2. *I. pseudacorus*
 - c' Perianth blue, lilac, or rarely white, sometimes with spots of other color.
 - d Stem zigzag, shorter than leaves, sometimes decumbent; flowers short-stalked, from all but lowest axils; capsule 6-angled. 3. *I. brevicaulis*
 - d' Stem erect, with flowers on upper part; axillary flowers long-stalked; capsule 3-angled, inner surface dull; petals obovate, little shorter than sepals; sepals with bright yellow pubescent blotch at base. 4. *I. virginica* var. *shrevei*

1. *Iris cristata* Aiton

Crested Dwarf Iris

REFERENCE: Selby 1892a:111 (Georgesville, *Werner*).

NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Braun 1967:403 (illus. p. 400).

2. **Iris pseudacorus* L.

Yellow Iris, Yellow Water Flag

Naturalized (native of Europe)

Flowers bright yellow; petals much shorter than the unbearded sepals; sepals dark lined towards interior.

HERBARIUM RECORDS: 25 May 1953—along the Olentangy R., Cols., *W. Goslin*; 21 May 1977—swampy ground on bank of Olentangy R., just N of Lane Ave. bridge, Cols., *W. Carr* 228; 22 May 1986—OSU campus, E bank of Olentangy R., N of Drake Union, in mud along edge or river, standing water, Cols., *Hollander* 042; 28 May 1988—along Olentangy R., ¼ mi. from Bethel Rd. & Rt. 315, Cols., *Kelly* 37; 29 May 1988—OSU campus, W bank of Olentangy R., between Lane Ave. bridge & Fawcett Center for Tomorrow, mudflat, *T. Lammers* 6228 (MU, OS); 20 May 1993—bike path along W bank of Olentangy R., ½ mi. S of Antrim Lake, E of Rt. 315, Sharon Twp., *Lowden* 5043.

NOTE: Not mentioned for Franklin Co. by Braun 1967:404 (illus. p. 402).

3. †*Iris brevicaulis* Raf.

Leafy Blue Flag, Lamance Iris, Zigzag Iris

REFERENCES: Braun 1967:404 (illus. p. 405); Stuckey & Roberts 1977:33; Stuckey & Roberts 1982:39; McCance 1984:A-142.

NOTE: No specimens seen from Franklin Co.

4. *Iris virginica* L. var. *shrevei* (Small) E.S. Anderson

Southern Blue Flag

Sepal bases with a yellow-orange blotch; petals only a little shorter than sepals; usually one lateral branch equaling main stalk. Syn.: *I. shrevei* Small

REFERENCES: Riddell 1834:158 (*Iris versicolor*, marshes); Sullivant 1840:41 (*Iris versicolor* L.); Selby & Craig 1890:16 (*Iris versicolor* L.); Braun 1967:404 (illus. p. 406).

HERBARIUM RECORDS: 1840—Cols., *Sullivant*; Jun 1887—Cols., *Craig*; Summer 1988—along Big Darby Creek between I-70 & Little Darby Creek.

ORCHIDACEAE, Orchid Family

Perennial herbs, terrestrial, often with rhizomes or corms; roots sometimes thickened; some species nongreen; leaves solitary or alternate on the stem (or rarely opposite), sometimes all basal; flowers epigynous, bisporangiate, solitary or in clusters; perianth zygomorphic; sepals 3, sometimes 2 of them united; petals 3, one of them, the lip, different from the others in size and shape, sometimes spurred; carpels 3, united; ovary 1-loculed with 3 parietal placentae; fertile stamens 1 or 2 (1 or more staminodes sometimes present), adnate to style and stigma and with them forming the column; pollen in pollinia; fruit a many-seeded capsule.

a Anthers 2; lip petal an inflated sac 2-7 cm long; flowers 1-3. 1. **CYPRIPEDIUM**

a' Anther 1; lip petal not an inflated sac or, if somewhat inflated, smaller.

b Leaves white- or pale-reticulate, in basal rosette. 3. **GOODYERA**

b' Leaves not white- or pale-reticulate.

c Leaves in 1 whorl of usually 5 on the stem; sepals much longer than petals. 7. **ISOTRIA**

- c' Leaf arrangement various, but leaves not in a single whorl on stem.
- d Plants yellow, brown, or purple, nongreen; scales, but not foliage leaves, present; perianth less than 1 cm long; lip sometimes with 1-3 short ridges. **12. CORALLORHIZA**
- d' Plants green, with 1 or more foliage leaves which are sometimes absent at anthesis.
- e Flower with a spur; leaves present at anthesis.
 - f Leaves 2, basal.
 - g Perianth greenish-white or -yellow; leaves as wide as long or nearly so. **5. HABENARIA**
 - g' Lip white, remainder of perianth pink-purple; leaves longer than wide. **4. ORCHIS**
 - f' Stem leafy. **5. HABENARIA**
- e' Flower without a spur.
 - h Lip above other perianth parts; flower apparently inverted. **9. CALOPOGON**
 - h' Lip below other perianth parts.
 - i Flowers solitary or in clusters of 2-3, 1.5-5 cm long.
 - j Flowers 2 or 3; cauline leaves less than 2 cm long, ovate, alternate, more than 1 present at anthesis. **8. TRIPHORA**
 - j' Flowers solitary, rarely 2 or 3; leaves not as above, one cauline leaf present at anthesis; floral bract(s) often leaflike; sepals and lateral petals not united. **6. POGONIA**
 - i' Flowers more numerous, in spikes or racemes.
 - k Flowers in twisted spikes or spikelike racemes; perianth white or greenish-white, except in one species less than 1 cm long; lip with 2 small basal callosities. **2. SPIRANTHES**
 - k' Flowers in racemes; set of other characters not as above.
 - l Leaves 2, basal; lateral petals linear or filiform, about 1 cm long. **10. LIPARIS**
 - l' Leaf 1, basal, appearing after anthesis; lip 1-1.5 cm long. **11. APLECTRUM**

1. *CYPRIPEDIUM* L. Lady's Slipper, Moccasin Flower

Roots fibrous, coarse; leaf-blades large, elliptic, ovate, or lanceolate; flowers solitary or few; sepals separate or the 2 lower united; lip an inflated sac 2-7 cm long; column bent downward, bearing an anther on each side and a bractlike staminode covering the tip.

- a Stem leafy; lip not cleft.
 - b Lateral petals white, not twisted; lip white or pink, streaked with rose or purple. **1. *C. reginae***
 - b' Lateral petals yellow, green, brown, or purple, usually twisted; lip yellow. **2. *C. calceolus***
- a' Leaves 2, basal; lip pink, cleft on upper side. **3. *C. acaule***

1. †*Cypripedium reginae* Walter Showy Lady's-slipper, Queen's Lady's-slipper, Big Pink-and-white
Leaves alternate; lateral petals oblong-elliptic, blunt; stems, leaf margins and veins with prominent pale long-pubescence. Syn.: *C. spectabile* Sw.
REFERENCES: Sullivant 1840:42; Selby & Craig 1890:15; Braun 1967:413 (illus. p. 412); McCance 1984:A-153.
HERBARIUM RECORD: 1840—Cols., Sullivant.

2. *Cypripedium calceolus* L.

Lip yellow; stems and leaves with brown rather than pale glandular pubescence.

Two varieties are recognized:

†var. *pubescens* (Willd.) Correll Large Yellow Lady's-slipper
Petals 5-9 cm long, lip 3-5 cm long; sepals greenish yellow and darker streaked. Syn.: *C. pubescens* Willd.
REFERENCES: Riddell 1834:158 (dense and shady woods); Sullivant 1840:42 (moccasin flower); Craig 1890:103 (a single specimen was found by Prof. W. R. Lazenby in the woods during the summer of 1882, 12 May 1882, 18 May 1884; I know of no plants growing near the city at present); Selby & Craig 1890:15; Braun 1967:413 (illus. p. 410); ODNR-DNAP 1996.
HERBARIUM RECORD: 7 & 9 May 1892—Big Darby, Selby.

†var. *parviflorum* (Salisb.) Fernald Small Yellow Lady's-slipper
Not always distinguished, differing essentially in its smaller size. Syn.: *C. parviflorum* Salisb.

REFERENCES: Sullivant 1840:42; Selby & Craig 1890:15.

NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Braun 1967:414.

CYPRIPEDIUM
SPIRANTHES



3. †*Cypripedium acaule* Aiton

Leaves 2, basal; flower 1, pink.

REFERENCE: Braun 1967:413 (illus. p. 410).

HERBARIUM RECORDS: 1840—Cols., *Sullivant*; 7 May 1892—Georgesville, *Werner*.

NOTE: *Sullivant* 1840:42 and *Selby & Craig* 1890:15 reported on plants collected in adjacent counties.

Stemless Lady's Slipper, Pink Moccasin-flower

2. SPIRANTHES Rich. Ladies' Tresses

Leaves usually narrow, basal or on lower part of stem; flowers in usually twisted spikes; perianth white or greenish-white, from about 0.5 to more than 1 cm long; lip with a callosity on each side at base.

One of two specimens collected by A. D. Selby from Big Darby on 3 Oct 1891 was annotated by P. M. Catling as †*Spiranthes magnicamporum* Sheviak (Great Plains Ladies' Tresses, Yellow Ladies' Tresses). Not treated by Braun 1967:431. This species was reported by McCance 1984:A-161. However, the indicated specimen appears to fit *Spiranthes cernua* var. *ochroleuca* having lip strongly curving from the claw and wedge shaped at base, with basal calli longer than wide.

- a Flowers in more than 1 rank; spike crowded; lip not or only slightly narrowed at middle.
- b Spring-flowering; lip with wide central area of yellow; sepals and lateral petals connivent in a hood; perianth to 6 mm long. 1. *S. lucida*
- b' Autumn-flowering; lip not yellow; sepals and lateral petals not connivent; perianth 6-12 mm long; callosities rounded. 2. *S. cernua*
- a' Flowers in 1 rank, the rachis spirally twisted; lower part of rachis and upper part of stem glabrous or nearly so; leaves often absent at anthesis.
- c Lip with median band of green; roots clustered; inflorescence about 1 cm wide; perianth 4-6 mm long. 3. *S. lacera*
- c' Lip white; roots usually solitary; inflorescence about 0.5 cm wide; perianth 2-4 mm long. 4. *S. tuberosa*

1. †*Spiranthes lucida* (H.H.Eaton) Ames

Shining Ladies' Tresses

Flowers in 2-3 rows along a somewhat twisted dense spike; basal leaves 1-2 cm wide, oblanceolate; lip yellow; viscidium oval; lip bright orange-yellow even to the tip.

REFERENCES: *Werner* 1893:93 (*Gyrostachys latifolia* (Torr.) Kuntze & *Spiranthes latifolia* Torr., Alum Creek Station, *Bogue*); McCance 1984:A-160.

NOTE: No specimens seen from Franklin Co. Not mapped for Franklin Co. by Braun 1967:432 (illus. p. 434).

2. †*Spiranthes cernua* (L.) Rich.

Nodding Ladies' Tresses

Inflorescence pubescent; flowers greenish-white, fragrant, in 2-3 rows along a somewhat twisted dense spike; leaves on scape bract-like except for lower 2-3 linear-oblanceolate basal blades; margin crisped; viscidium linear, more than 3 times as long as wide; dorsal sepal more than 7.5 mm long; basal calli longer than wide; lip not strongly curving from the claw; basal calli longer than wide.

REFERENCES: *Sullivant* 1840:42; *Selby & Craig* 1890:16; Braun 1967: 434 (illus. p. 434).

HERBARIUM RECORDS: 1840—Cols., *Sullivant*; 5 Sep 1891—Cols., *Werner* (CLM).

The following rather large variant is recognized:

var. *ochroleuca* (Rydb.) Ames

Yellow Ladies' Tresses

Basal calli usually more than 1 mm long; leaves usually present at flowering time; lip strongly curving from the claw, cuneate at base; perianth 8-9 mm long. Syn.: *S. ochroleuca* (Rydb.) Rydb.

HERBARIUM RECORDS: 22 Nov 1890—Big Darby, *Selby*; 3 Oct 1891—Big Darby, *Selby*; 29 Sep 1986—Highbanks Metro Park (Delaware Co.), field, *Watts* 357.

NOTE: Not mentioned for Franklin Co. by Braun 1967:435 (illus. p. 434).

3. †*Spiranthes lacera* (Raf.) Raf. var. *gracilis* (Bigelow) Luer

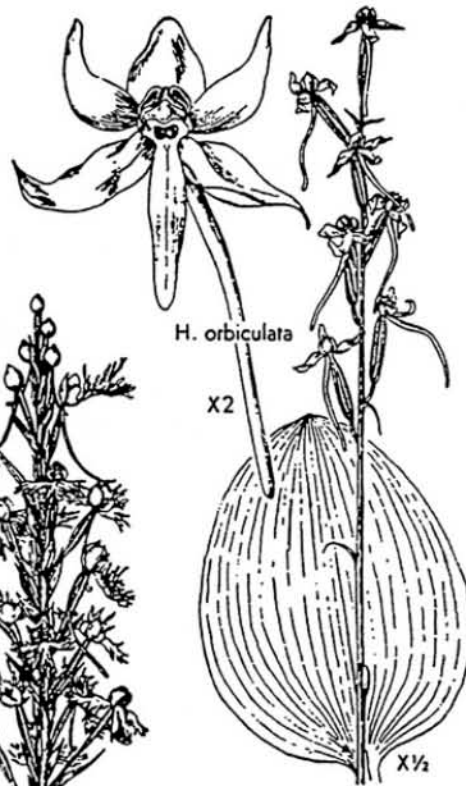
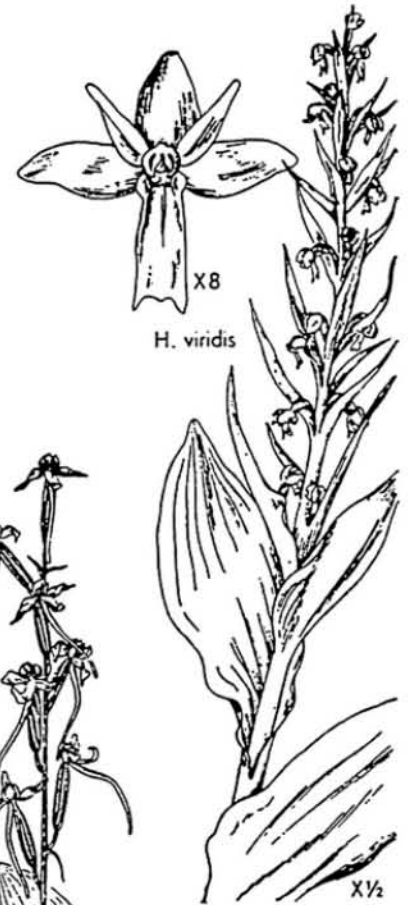
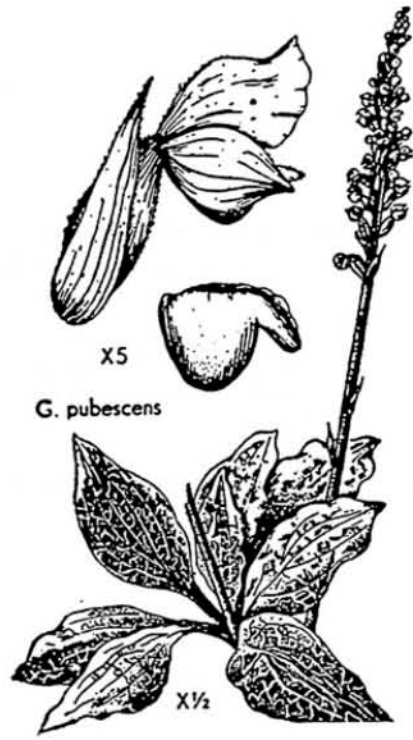
Southern Slender Ladies' Tresses

Inflorescence about 1 cm wide; flowers 1-ranked on a spirally twisted rachis; rachis and upper stem glabrous; perianth 5-6 mm long; lip with median green band. Syn.: *S. gracilis* (Bigelow) L.C.Beck

REFERENCES: Riddell 1834:158 (*Neottia tortilis*, dry prairies); King 1981:121 (1-Battelle-Darby Creek Metro Park, bluff prairie).

HERBARIUM RECORDS: 8 Oct 1978—along path of Hutchins property, extreme NW Perry Twp., Mrs. Hutchins & E. Thomas; 1 Sep 1982—Blendon Woods, in the big meadow along the woodland border, *Owens*.

GOODYERA
ORCHIS
HABENARIA



NOTE: Sullivant 1840:42 (*Spiranthes tortilis* Rich.) reported on plants collected in adjacent counties. Not mapped for Franklin Co. by Braun 1967:432 (illus. p. 430).

4. †*Spiranthes tuberosa* Raf.

Little Ladies' Tresses

Root single; flowers in 1 rank; axis of inflorescence glabrous, rachis spirally twisted; lip white without greenish central blotch; perianth less than 4 mm long.

HERBARIUM RECORD: 3 Sep 1992—W side of Cabbage Rd., rare in dry openings in brushy field, approx. ½ mi. S of Walnut St., Blendon Twp., New Albany Quad., *McCormac* 4902.

NOTE: Not mapped for Franklin Co. by Braun 1967:431 (illus. p. 430).

3. GOODYERA R.Br. Rattlesnake-plantain

Leaves ovate or ovate-lanceolate, with white or pale-green reticulate veins, in a basal rosette; flowers in bracted spikelike raceme, upper part of scape glandular-pubescent; perianth white, to about 6 mm long; lip saccate, with pointed tip.

1. †*Goodyera pubescens* (Willd.) R.Br.

Downy Rattlesnake-plantain

Raceme densely flowered; tip less than half as long as sac; leaves ovate-elliptic, in evergreen rosettes, with white, finely reticulate veins.

REFERENCES: Riddell 1834:158 (slaty ravines); Sullivant 1840:42; Selby & Craig 1890:16; Braun 1967:435 (illus. p. 436).

HERBARIUM RECORDS: 1840—Cols., *Sullivant*; Jun 1888—N Cols. Run, *Craig*; [1890s]—Franklin Co., *Selby*; 1925—moist ravine benches, Big Walnut Creek, Westerville, *Camp*; 29 Jun 1929—Big Darby Creek, *E. Thomas*.

4. ORCHIS L. Orchis

Plant 1-2 dm tall; leaves 2, basal, obovate or elliptic; flowers long-bracted, few, in a raceme; lip white, to 2 cm long, with conspicuous spur; sepals and lateral petals pink to lavender, connivent in a hood.

1. †*Orchis spectabilis* L.

Showy Orchis

Leaves 2, basal, obovate; raceme few-flowered, with foliaceous bracts; lip and prominent spur white, sepals and lateral petals pink-lavender.

REFERENCES: Riddell 1834:158 (dense and shady woods); Sullivant 1840:42; Craig 1890:103 (Mr. W. S. Devo found a specimen in the woods in 1882, and it has never been found since, 10 May 1887, 22 May 1888; this is a very rare plant about Cols.; Ernest Evans found a specimen in Neil's run two years ago; I found one in the N Cols. run last year, and this spring found six or eight plants in the Worthington "big woods" near Noble's run); Selby & Craig 1890:16; Braun 1967:414 (illus. p. 410).

HERBARIUM RECORDS: 1840—Cols., *Sullivant*; Jun 1888—Cols., *E. Evans*; Jun 1889—near Westerville, *Craig & G[reen]*; 1890—near Central College, *Frank*; 14 May 1892—Black Lick, *Werner*; 16 May 1906—Cols., *Way*.

5. HABENARIA Willd. Fringed Orchid, Rein-orchid

Stem leafy or scapose; flowers in bracted spikes or racemes; lip spurred, its margin various; perianth of various colors; sepals and lateral petals separate. (*Coeloglossum* Hartm., *Platanthera* Rich.)

a Leaves 2, basal, broadly elliptic to circular; flowers greenish-white or white, pediceled; scape bracted below inflorescence. 3. *H. orbiculata*

a' Stem-leaves present.

b Lip toothed or crenulate, not fringed, not 3-parted; perianth green or greenish-yellow.

c Spur pouchlike, much shorter than lip. 1. *H. viridis* var. *bracteata*

c' Spur slender, equaling or longer than lip; lip erose at tip, a small lobe on each side at base, a tubercle on median line at base. 2. *H. flava*

b' Lip 3-parted, each part toothed or fringed.

d Perianth white, green, or yellow-green; lip deeply fringed.

e Lateral petals entire; spur 2 cm long or less. 4. *H. lacera*

e' Lateral petals toothed or erose; spur 2-4 cm long; lateral petals and upper sepal forming a hood. 5. *H. leucophaea*

- d' Perianth lavender to rose-purple, rarely white.
- f Lip segments erose, terminal one deeply notched. 6. *H. peramoena*
- f' Lip segments lacerate or with short fringe. 7. *H. psycodes*,
 - g Raceme usually less than 5 cm thick; lip 1.5 cm wide or less, var. *psycodes*
 - g' Raceme 5 cm thick or more; lip 1.5-2.5 cm wide, var. *grandiflora*

1. †*Habenaria viridis* (L.) R.Br. var. *bracteata* (Muhl.) A.Gray Long-bracted Green Orchid
Floral bracts divergent, narrow and large; spur short 2-3 mm; lip oblong, narrow, 3-toothed at apex; lateral petals, narrow and erect. Syn.: *Coeloglossum viride* (L.) Hartm.
REFERENCES: Braun 1967:423 (illus. p. 422); Stuckey & Roberts 1982:39; McCance 1984:A-148.
HERBARIUM RECORD: 10 May 1930—near Big Darby Creek, Prairie Twp., Gordon.
2. †*Habenaria flava* (L.) R.Br. var. *herbiola* (R.Br.) Ames & Correll Tubercled Rein-orchid
Stems with leaves; flowers greenish-yellow; floral bracts much exceeding flowers; lip with a lobe on each side at base, and a median tubercle below middle; spur longer than lip. Syn.: *H. herbiola* R.Br., *H. virescens* Spreng., *Platanthera flava* (L.) Lindl. var. *herbiola* (R.Br.) Luer
REFERENCES: Riddell 1836:17 (Worthington, swamps, Paddock); Braun 1967:423 (illus. p. 422).
HERBARIUM RECORDS: Jun 1889—Bigwoods, Cols. & Worthington, Craig & Worthington, Cols. & near Westerville, Craig; Jul 1890—damp woods, W of Mt. Carmel, Craig; 28 Jun 1892—Franklin Co., W. Kellerman; 23 May 1933—Red Hills, Taylor's Swamp, forest, Hicks & Chapman; 27 May 1933—swamp woods, Red Hills, Hicks.
NOTE: Sullivant 1840:42 and Selby & Craig 1890:16 reported on plants collected in adjacent counties.
3. †*Habenaria orbiculata* (Pursh) Torr. Large Round-leaved Orchid
Plants with 2 large circular basal leaves, flat on the ground; stem with several bracts below inflorescence; flowers pediceled, greenish-white. Syn.: *Platanthera orbiculata* (Pursh) Lindl.
REFERENCES: Riddell 1834:158 (Dense and shady woods); Selby & Craig 1890:16; Braun 1967:417 (illus. p. 416).
HERBARIUM RECORD: 2 Jun 1889—near Westerville, Gould.
4. †*Habenaria lacera* (Michx.) Lodd. Ragged Fringed Orchid
Stem leafy; flowers yellow-green; lip 3-parted, cut almost to base into filamentous fringed sections; lateral petals narrow, erect; spur 2 cm long or less. Syn.: *H. lacera* R.Br.
REFERENCES: Selby & Craig 1890:16; Braun 1967:420 (illus. p. 420).
HERBARIUM RECORDS: 1840—Cols., Sullivant; 14 May 1892—Black Lick, Werner (CLM, OS); 21 Jun 1977—Pickerington Marsh, disturbed woods N of Bowen Rd., NE ¼ Sect. 18, Madison Twp., Cusick (KE); 28 Jun 1990—Hoover Dam Park, W side of Cabbage Rd., ½ mi. S of Walnut St., Blendon Twp., Lowden 4427.
5. †*Habenaria leucophaea* (Nutt.) A.Gray Prairie Fringed Orchid, Prairie White Fringed Orchid
Stems leafy; flowers white; lip 3-parted, fringed; lateral petals and upper sepal forming a hood. Syn.: *Platanthera leucophaea* (Nutt.) Lindl.
REFERENCES: Sullivant 1840:42, 60 (grows plentifully in the meadows immediately W of Franklinton; flowers fragrant); Selby & Craig 1890:16; Braun 1967:419 (the Franklin Co. record is based on a specimen in the Darlington Herbarium at West Chester State College, collected by Wm. S. Sullivant prior to 1842) (illus. p. 420); Stuckey & Roberts 1977:33 (Franklin Co. record: previous to 1900; acidic substrate conditions); Stuckey & Roberts 1982:40 (inhabits prairies in addition to sites such as fens); McCance 1984:A-157.
HERBARIUM RECORD: 1840—Cols., Sullivant.
6. †*Habenaria peramoena* A.Gray Purple Fringeless Orchid
Stem leafy; flowers purple; lip 3-parted, segments erose, not fringed, terminal one wedge-shaped and deeply notched at apex. Syn.: *Platanthera peramoena* (A.Gray) A.Gray
REFERENCES: Braun 1967:418 (illus. p. 418); Spooner & Shelly 1983:57 (distribution map).
HERBARIUM RECORD: 3 Oct 1896—Clintonville, McCall.
7. *Habenaria psycodes* (L.) Spreng.
Two varieties are recognized:
†var. *psycodes* Small Purple Fringed Orchid
Stem leafy; lip 3-parted, 1.5 cm wide or less, segments short fringed; raceme less than 5 cm thick; flowers rose-purple. Syn.: *Platanthera psycodes* (L.) Lindl.
REFERENCES: Riddell 1834:158 (*Habenaria fissa*, wet prairies); Sullivant 1840:42; Selby & Craig 1890:16; Braun 1967:419 (illus. p. 418).
HERBARIUM RECORD: Summer 1938—OSU Botanical Gardens, C. Jones.
NOTE: Braun 1967:419 mapped the typical var. Check Braun's card file for specimens cited for Franklin Co.

†var. *grandiflora* (Bigelow) A. Gray

Large Purple Fringed Orchis

Raceme thicker; lip wider. Syn.: *H. fimbriata* (Aiton) R.Br., *Platanthera grandiflora* (Bigelow) Lindl.

REFERENCES: Riddell 1834:158 (wet prairies); Sullivant 1840:42; Selby & Craig 1890:16.

NOTE: No specimens seen from Franklin Co. Not mentioned for Franklin Co. by Braun 1967:419 (known only from Ashtabula and Portage Cos.).

6. POGONIA Juss.

Stem with 1 ovate or elliptic leaf, 1-2 basal petioled leaves and a bracteal leaf under the flower sometimes present, also; flowers usually solitary (1-3); perianth about 1.5-2.5 cm long, rose-pink; lip crested with 3 rows of fleshy hairs.

1. †*Pogonia ophioglossoides* (L.) Ker Gawl.

Rose Pogonia, Snake-mouth

Stem with 1 elliptic leaf; flower solitary, rose-pink with a bracteal leaf below; lip crested with 3 rows of white fleshy hairs.

REFERENCES: Sullivant 1840:42; Selby & Craig 1890:16.

HERBARIUM RECORD: 1840—Cols., Sullivant.

NOTE: Not mapped for Franklin Co. by Braun 1967:424 (illus. p. 426).

7. ISOTRIA Raf. Whorled Pogonia

Stem with a single whorl of usually 5 obovate or elliptic leaves; flowers usually solitary; sepals to 6 cm long, green to purple-brown, lateral petals and lip much shorter, yellow-green; lip streaked with purple and crested.

1. †*Isotria verticillata* (Willd.) Raf.

Larger Whorled Pogonia

Leaves whorled, 5; flower single, erect, long-peduncled; sepals 3, linear, green to brown-purple, more than twice the length of the lateral petals.

REFERENCE: Braun 1967:425 (illus. p. 426).

HERBARIUM RECORD: 1930—Red Hills Region, opposite Central College, Chapman & Gordon.

8. TRIPHORA Nutt.

Leaves alternate, sessile, ovate, 2 cm long or less; flowers few, lasting only a day; perianth pink or white, lip veined or tinged with purple or green, about 1.5 cm long.

1. †*Triphora trianthophora* (Sw.) Rydb.

Three Birds Orchid, Nodding Pogonia

Leaves alternate, small, ovate; flowers nodding, usually 3, pink-white, borne in axils of upper leaves; tubers whitish.

REFERENCES: Riddell 1834:158; Sullivant 1840:42; Selby & Craig 1890:16; Camp 1940:55 (Type locality, Bexley, near Cols., Robt. B. Gordon & J. H. Schaffner); Braun 1967:425 (illus. p. 426); McCance 1984:A-164; ODNR-DNAP 1996.

HERBARIUM RECORDS: 1890—Worthington Woods, near Cols., E. M. Wilcox; 6 Aug 1892—Cols., Werner; 18 Oct 1934—beech woods, 3 mi. E of Bexley, near Cols., Truro Twp., C. Jones; 20 Oct 1934—beech woods, near Cols., Gordon & J. H. Schaffner.

NOTE: *Triphora trianthophora* var. *schaffneri* Camp was described in *Rhodora* 42:55 (1940) for which the above mentioned Gordon & Schaffner specimen is an isotype.

9. CALOPOGON R. Br. Grass-pink

Leaf 1, rarely 2, narrow, elongate, basal; flowers 2-several; perianth rose-purple or pink; lip uppermost, its upper surface bearing orange-tipped or red or purple hairs or papillae.

1. †*Calopogon tuberosus* (L.) Britton, Sterns & Poggenb.

Grass-pink, Limnodorium

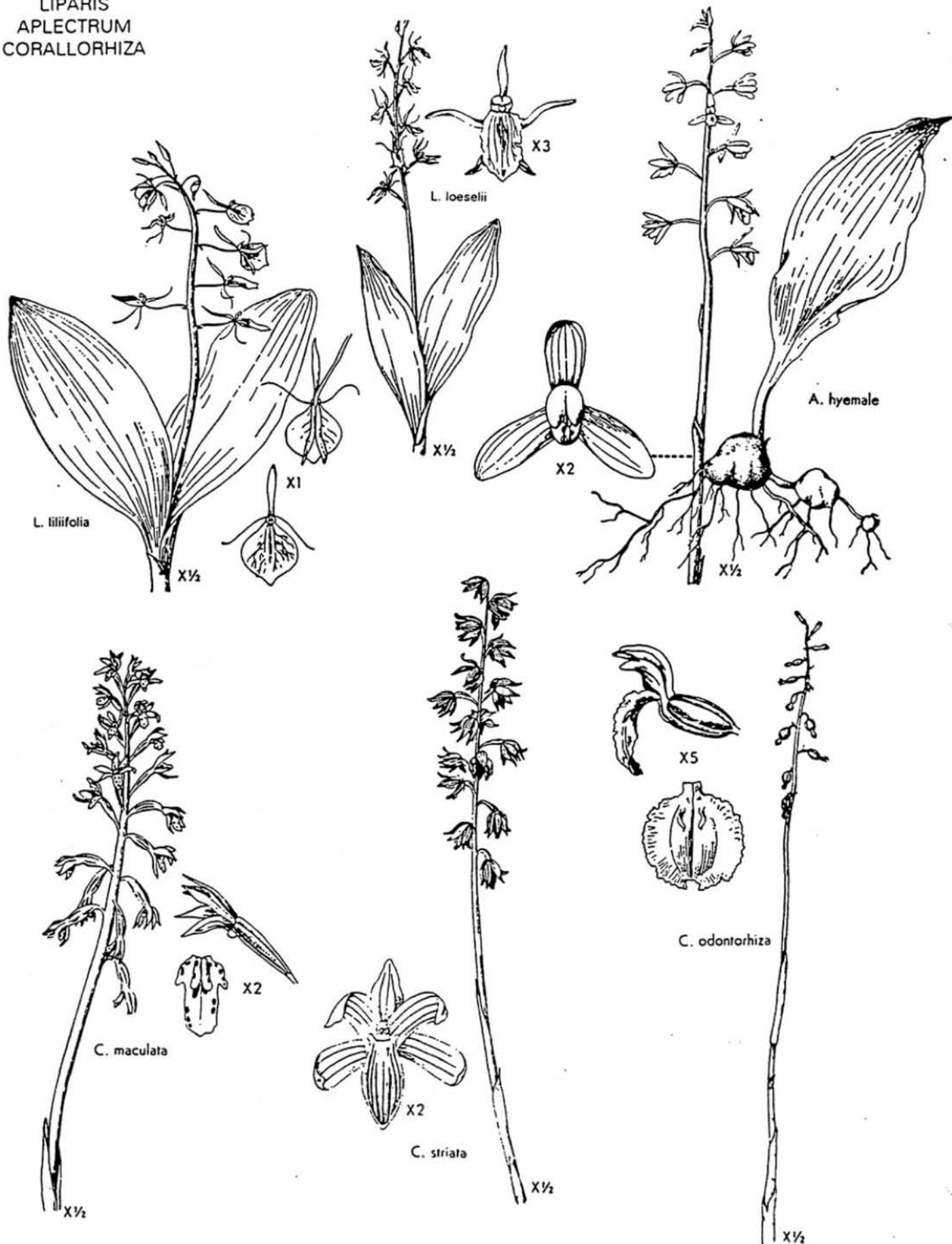
Leaf 1, elongate; flowers 2 or more, rose-purple or pink; lip uppermost, fan-shaped, narrowed at base with golden-orange tipped hairs. Syn.: *C. pulchellus* (Salisb.) R.Br.

REFERENCES: Riddell 1834:158 (*Cymbidium pulchellum*, wet prairies); Sullivant 1840:42; Selby & Craig 1890:15.

HERBARIUM RECORD: 1840—Cols., Sullivant.

NOTE: Not mapped for Franklin Co. by Braun 1967:427 (illus. p. 428).

LIPARIS
APLECTRUM
CORALLORHIZA



10. LIPARIS Rich. Twayblade

Stem low; leaves 2, basal, shining, ovate or elliptic-lanceolate, to 15 cm long; flowers bracted, in a raceme; lateral petals linear or filiform.

- a Sepals greenish-white, petals purple or mauve, about 1 cm long; lip with red-purple veins. 1. *L. liliifolia*
a' Perianth yellow-green, about 5 mm long. 2. *L. loeselii*

1. †*Liparis liliifolia* (L.) Rich. Large Twayblade, Mauve Sleekwort
Leaves 2, basal, shiny, elliptic to broadly oval; scapes angled, flowers on long divergent pedicels; sepals green-white, petal purple-mauve.

REFERENCES: Riddell 1834:158 (dense and shady woods); Sullivant 1840:42; Selby & Craig 1890:16; Braun 1967:438 (illus. p. 440).
HERBARIUM RECORDS: 6 Jun 1908—ravine of Olentangy Park, Cos., *J. Keil*; 21 Sep 1931—Red Hills near Central College, *Chapman & Ireland, Jr.*; 24 & 28 May 1933—Indian Springs, *Hicks*; 17 Jul 1971—Franklin Co., *Roberts 1345*; 21 Jun 1977—Pickerington Marsh, scattered through disturbed woods, N of Bowen Rd., NE ¼ Sect. 18, Madison Twp., *Cusick (KE)*.

2. †*Liparis loeselii* (L.) Rich. Fen Orchid, Loesel's Twayblade
Leaves 2, basal, shiny, lanceolate-elliptic; scapes angled above; flowers on short ascending pedicels; perianth yellow-green.

REFERENCES: Riddell 1834:158 (*Malaxis longifolia*, dense & shady woods); Braun 1967:439 (illus. p. 440).
HERBARIUM RECORDS: 15 May 1933—Baumgardner's Bog, Jackson Twp., *Chapman*; 24 May 1933—Indian Springs, *Lawrence E. Hicks*.

11. APLECTRUM Torr. Putty-root

Corms connected in a series; leaf 1, basal, petioled, elliptic, appearing late in season and sometimes shriveled before next year's flowering; scape with some bracts; flowers in a raceme, bracts small; perianth 1 cm long or a little more, green, yellow, and white, or tinged with purple.

1. †*Aplectrum hyemale* (Muhl.) Torr. Putty-root, Adam and Eve
Corms glutinous (putty-like), attached by slender connectives; leaf basally ensheathed, ovate with whitish veins, longitudinally plicate; flowers greenish-yellow-purple; capsules pendant. Syn.: *A. hyemale* Nutt.

REFERENCES: Riddell 1834:158 (dense and shady woods); Sullivant 1840:42; Selby & Craig 1890:15; Braun 1967:441 (illus. p. 440).
HERBARIUM RECORDS: 1840—Cols., *Sullivant*; May 1892—Scioto R., near Cols., *E. M. Wilcox*; 1 Jun 1896—Franklin Co., *Fullmer*.

12. CORALLORHIZA Gagnebin Coral-root

Purple, yellow, or brown saprophytes with coralloid roots; scape bearing sheathing scales; flowers in racemes; perianth 8 mm long or less; at base of lateral sepals a short spur adnate to top of ovary.

- a Lip with a tooth or lobe on each side at or below middle; sepals, lateral petals, and lip white, spotted with red or purple; spur of sepals and lateral lobes of lip prominent; capsule 1.5-2.5 cm long. 1. *C. maculata*
a' Lip entire, neither lobed nor toothed, but sometimes with erose or wavy margins.
b Lip 8-12 mm long, white, heavily striped with purple, or wholly purple; sepals and lateral petals 8-15 mm long, arching forward, with 3-5 strong purple stripes. 2. *C. striata*
b' Lip about 4 mm long, margined and spotted with purple, often wider than long; sepals and lateral petals connivent in a hood; capsule 6-8 mm long; autumn-flowering. 3. *C. odontorhiza*

1. †*Corallorhiza maculata* (Raf.) Raf. Spotted Coral-root, Large Coral-root
Plants saprophytic, yellow-brown-purple; rhizomes coral-like; ovary summit with a protuberance; lip lobed on each side. Syn.: *C. multiflora* Nutt.

REFERENCES: Sullivant 1840:42; Selby & Craig 1890:15; Braun 1967:444 (illus. p. 442).
HERBARIUM RECORDS: 5 Sep 1890—Central College, *E. V. Wilcox*; 4 Oct 1890—Central College, *E. V. Wilcox*; 2 Oct 1942—Brown Fruit Farm, *Roller*; 3 Aug 1982—Highbanks Metro Park (Franklin & Delaware Cos.), Loc. I, 60, habitat oak-hickory, *G. Moore 211*.

2. *Corallorhiza striata* Lindl. Striped Coral-root

Lip entire, solid purple; sepals and petals 3-5 nerved, conspicuously striped with purple.

HERBARIUM RECORD: 1891—Central College, *Selby*.

NOTE: Not treated by Braun 1967:443. See Voss 1972:450 (illus. p. 451).

3. †*Corallorhiza odontorhiza* (Willd.) Nutt.

Small-flowered or Fall Coral-root

Flowering in fall; flowers small; lip 3-4 mm long, white with two purple spots and purple margin; sepals and petals hardly spreading.

REFERENCE: Riddell 1834:158 (dense and shady woods).

HERBARIUM RECORD: 27 Sep 1985—0.2 mi. W of Hubbard Rd. & 0.3 mi. N of Rt. 40, rare, in dry-mesic oak-maple woods, Prairie Twp., *Knoop* (KE).

NOTE: Not mapped for Franklin Co. by Braun 1967:443 (illus. p. 442).