

Rather fleshy; stem striate; blades petioled; ocreae oblique; calyx 5-parted, petaloid; stamens 8; styles 3; stigmas capitate; achene acute, smooth and shining, exerted beyond calyx.

1. \**Fagopyrum esculentum* Moench

Buckwheat

Escape from cultivation (Asian)

Syn.: *Fagopyrum sagittatum* Gilib.

REFERENCE: Riddell 1834:120 (*Polygonum fagopyrum*, naturalized).

NOTE: No specimens seen from Franklin Co.

## CLUSIACEAE, Mangosteen Family

Shrubs and herbs; leaves opposite, entire, dotted; flowers hypogynous, bisporangiate, in cymose clusters or solitary; sepals 4-5; corolla regular, petals separate, 4-5; stamens few to many, separate or basally united in 3 or more groups; carpels 2-5, united, styles as many, separate or united at base; locules of ovary as many as carpels or locule 1, the placentae then parietal and as many as carpels; fruit a many-seeded capsule. (Hypericaceae, Guttiferae)

a Petals yellow; stamens many to few, sometimes united at base in 3 or 5 clusters. 1. **HYPERICUM**

a' Petals pink; stamens usually 9, united in 3 groups, a large gland between each 2 groups. 2. **TRIADENUM**

### 1. **HYPERICUM** L. St. John's-wort

Herbs and shrubs; flowers usually in cymose clusters; carpels 3 or 5 (rarely 4 or 6); ovary 1-loculed with parietal placentae, or 3-5-loculed with axile placentae. (*Ascyrum* L.)

a Sepals and petals 4, outer pair of sepals larger; styles 2. 1. *H. hypericoides*

a' Sepals and petals 5, styles and stigmas 3-5.

b Styles, carpels, and locules 5. 4. *H. pyramidatum*

b' Styles and carpels 3; locules 3 or 1.

c Stamens 15-40 or more; flowers usually more than 7 mm wide.

d Shrub; stamens separate; blades linear to narrowly elliptic; twigs 2-edged. 2. *H. prolificum*

d' Herbs, sometimes slightly woody at base.

e Petals and sometimes other flower-parts black-dotted or -lined; ovary and capsule 3-loculed, surface marked with oil-vesicles; stamens in 3-5 groups.

f Stem much branched; petals black-dotted near margin; sepals little or not black-dotted; blades 2-4 cm long. 5. *H. perforatum*

f' Stem little branched below inflorescence; petals and sepals lined and dotted with black; blades 4-6 cm long. 6. *H. punctatum*

e' Petals mostly without black dots and lines; ovary and capsule 1-loculed or incompletely 3-loculed, mostly without oil-vesicles. 3. *H. sphaerocarpum*

c' Stamens 5-12 (rarely -20); flowers 7 mm wide or less.

g Blades minute, scalelike, 1-3 mm long; flowers nearly sessile; capsule much longer than sepals. 8. *H. gentianoides*

g' Blades more than 3 mm long, linear to ovate, more than 3-nerved; bracts of ultimate branches of inflorescence subulate. 7. *H. mutilum*

### 1. †*Hypericum hypericoides* (L.) Crantz var. *multicaule* (Michx.) Fosberg

St. Andrew's Cross

Low lying, somewhat woody shrub; corolla yellow; sepals and petals 4; leaves on both sides with many translucent dots. Syn.: *Ascyrum hypericoides* L. var. *multicaule* (Michx.) Fernald

REFERENCES: Braun 1961:270 (illus. p. 272); Cooperrider 1995:120 (illus. p. 116).

HERBARIUM RECORD: 14 Aug 1932—Red Hills, Chapman.

### 2. *Hypericum prolificum* L.

Shrubby St. John's-wort

Shrub; principal leaves 3-8 cm long; upper branches winged with 2-4 angles; flowers yellow. Syn.: *H. spathulatum* (Spach) Steud.

REFERENCES: Riddell 1834:117 (dry prairies); Sullivant 1840:12; Selby & Craig 1890:8; Selby 1892a:111 (#113 Re-collections); Braun 1961:271 (illus. p. 272); Cooperrider 1995:118 (illus. p. 119).

HERBARIUM RECORDS: 29 Jul 1882—OSU campus, Cols., *Devol*; May 1890—near Cols., *E. V. Wilcox*; 2 Jul 1890—Franklin Co., *Selby*; 11 Jul 1892—Cols., *Bogue*; Aug 1892—Cols., *Werner* (CLM); 16 Aug 1898—OSU Botanical Garden, cult., Cols., *J. H. Schaffner*; 12 Jul 1933—NE Cols., *McCalmont*; 2 Sep 1964—Rt. 1, 0.9 mi. NE of Pickaway Co. line, hillside, Pleasant Twp., *E. Herrick*; 14 Jul 1982—Blendon Woods, moist area near Nature Center, *Owens*.

3. *Hypericum sphaerocarpum* Michx.

Round-fruited St. John's-wort

Herb with translucent dots only (black dots and lines absent); blades linear to narrowly oblong, 3-7 cm long, acute; petals more than 4 mm long; stamens many; seeds rough-pitted; styles united at base; stigmas minute.

REFERENCES: Selby & Craig 1890:8 (*Hypericum cistifolium* Lam.); Cooperrider 1995:118 (illus. p. 119).

HERBARIUM RECORDS: 20 Jul 1890—Scioto R., *Selby* (OS, WOOS); 20 Jul 1890—Franklin Co., *Selby*; 1 Jul 1891—Georgesville, *Werner* (CLM—fruit 10 Oct 1891); 29 Aug 1892—Georgesville, *Werner* (BGSU, CLM); 18 Aug 1929—limestone outcrop along Big Darby Creek S of National Rd., *Gordon & Chapman*.

4. *Hypericum pyramidatum* Aiton

Great St. John's-wort, Giant-hypericum

Large herb; leaves lanceolate or elliptic; flowers large, petals 2-3 cm long; capsule 2-3 cm long. Syn.: *H. ascyron* L., misapplied

REFERENCES: Riddell 1834:117 (meadows); Riddell 1835:15 (Worthington); Selby 1892a:110 (Alum Creek Station, *Werner*); Cooperrider 1995:115 (illus. p. 116).

HERBARIUM RECORDS: 11 Aug 1895—Cols., *W. Kellerman*; 13 Sep 1901—near canal S of Steelton, *Tyler*.

NOTE: Sullivant 1840:12 and Selby & Craig 1890:8 reported on plants collected in adjacent counties.

5. \**Hypericum perforatum* L.

Common St. John's-wort

Naturalized (native of Europe)

Herbs with black dots or lines on leaves, internodes or perianth; principal leaves usually less than 2.0 cm long and 10 mm wide; upper internodes sharply ridged; flowers yellow.

REFERENCES: Riddell 1834:117 (meadows); Sullivant 1840:12 (naturalized); Craig 1890:70 (rare, a few specimens may be found on the river bank W of the island, growing along the dike, 19 Jun 1887); Selby & Craig 1890:8 (introduced); Cooperrider 1995:117 (illus. p. 116).

HERBARIUM RECORDS: 14 Jul 1888—OSU Farm, Cols., *Selby*; 17 Jun 1895—Cols., *W. Kellerman*; 3 Jul 1925—Worthington, *R. Crane* (OWU); 28 May 1982—W bank of Olentangy R. along parking lot by Union Cemetery, ½ mi. N Ackerman Rd., *Paulson 65*; 1 Jul 1982—Blendon Woods, common in open areas, *Owens*; 16 Jul 1986—Highbanks Metro Park (Delaware Co.), field, *Watts 318* (OWU); 14 Jun 1989—Rt. 315 ramp going N off Henderson Rd., Clinton Twp., *Lowden 4203*; 11 Aug 1989—Rt. 33, ½ mi. S of Henderson Rd. jct. along roadside, Perry Twp., *Lowden 4261*; 28 Jun 1990—W side of Cabbage Rd., 0.5 mi. S of Walnut St., Hoover Dam Park, Blendon Twp., *Lowden 4423*; 15 Jun 1991—Knightbridge Rd., just N of Henderson Rd., Clinton Twp., *Lowden 4696*.

6. *Hypericum punctatum* Lam.

Spotted St. John's-wort

Herbs with black dots or lines on leaves, internodes or perianth; principal leaves more than 2.0 cm long and 8 mm wide; upper internodes rounded, without conspicuous ridges; flowers yellow.

REFERENCES: Riddell 1834:117 (*Hypericum corymbosum*, wet prairies); Craig 1890:70 (*Hypericum maculatum* Walter; I found three plants this spring growing on a small island in the large pond which divides the island into two sub-equal parts; they grew in a damp place among a cluster of willow bushes, 11 Jul 1882, 24 Jul 1887); Selby & Craig 1890:8 (*Hypericum maculatum* Walter); Cooperrider 1995:117 (illus. p. 116).

HERBARIUM RECORDS: 11 Aug 1882—Cols., *W. Green*; Jul 1888—Cols., *Craig*; 1890—Franklin Co. *Selby*; 20 Jul 1890—Glover's Woods, Cols., *Selby* (OS, WOOS); 24 Jul 1890—OSU campus, near Cols., *Hine*; 11 Jul 1898—Cols., *J. H. Schaffner*; 17 Jul 1987—Highbanks Metro Park (Delaware Co.), open fields, *Watts*; 30 Jun 1991—rocky shoreline of the Scioto R., ½ mi. N of Fishinger Rd. bridge, Upper Arlington, Perry Twp., *Lowden 4746*; 25 Jul 1992—Slate Run Wood Ct., off Henderson Rd., ½ mi. E of Sawmill Rd., Perry Twp., *Lowden 5009*.

7. *Hypericum mutilum* L. var. *mutilum*

Dwarf St. John's-wort, Low Centaury

Herb, with translucent dots only (black dots and lines absent); leaves approx. 2 cm long; bracts subtending ultimate clusters of 3 flowers subulate, approx. 1.5 mm long, 0.5 mm wide, with acuminate apex; flowers tiny, yellow. Syn.: *H. parviflorum* Willd.

REFERENCES: Riddell 1834:117 (marshes); Sullivant 1840:12; Craig 1890:70 (I found a few specimens along the brook a little to the E of the culvert last Sep; the masons in repairing the culvert this spring dug the bank back several feet and laid a wall, thus destroying the locality); Selby & Craig 1890:8; Cooperrider 1995:121 (illus. p. 119).

HERBARIUM RECORD: 6 Aug 1897—Hamilton Twp., *W. Kellerman*.

8. *Hypericum gentianoides* (L.) Britton, Sterns & Poggenb.

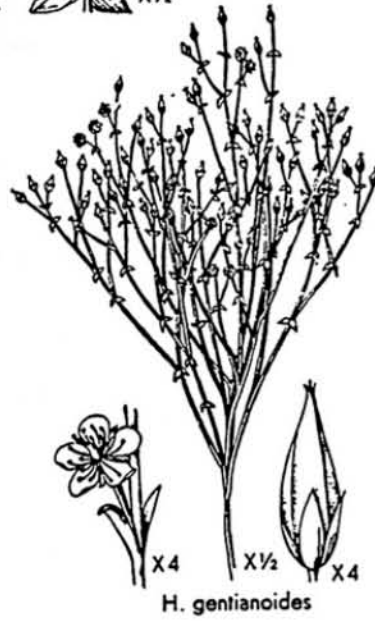
Orange-grass, Pineweed

Herb; corolla yellow; sepals and petals 5; leaves minutes, hardly visible, less than 2 mm long and 0.5 mm wide; capsules much longer than calyx.

HERBARIUM RECORD: 1840—Cols., *Sullivant*.

NOTE: Sullivant 1840:12 (*Hypericum sarothra* Michx.) reported on plants collected in adjacent counties. Not mapped for Franklin Co. by Cooperrider 1995:123 (illus. p. 122).

HYPERICUM  
TRIADENUM  
TILIA



## 2. TRIADENUM Raf. Marsh St. John's-wort

Marsh herbs; perennial; glabrous; perianth 5-merous; petals pink; stamens 9, the filaments connate into 3 fascicles of 3, alternating with 3 conspicuous glands.

### 1. *Triadenum fraseri* (Spach) Gleason

St. John's-wort

Leaves purplish, obtuse, rounded at apex, dotted beneath, sessile, cordate at base; sepals oblong or elliptic, 5 mm long or less, obtuse to rounded at apex; filaments united only at base; styles usually not more than 1 mm long. Syn.: *T. virginicum* (L.) Raf. var. *fraseri* (Spach) Cooperr.

REFERENCES: Riddell 1834:117 (*Hypericum virginicum*, marshes—dense and shady woods); Riddell 1835:15 (*Hypericum virginicum*, Worthington, wet woods); Sullivant 1840:12 (*Elodea virginica* Nutt.); Selby & Craig 1890:8 (*Elodea campanulata* Pursh).

HERBARIUM RECORD: 1840—Cols., Sullivant.

NOTE: Not mapped for Franklin Co. by Cooperrider 1995:124.

## TILIACEAE, Linden Family

### 1. TILIA L. Linden, Basswood

Trees; leaves alternate, simple, stipuled, 2-ranked, blades ovate, oblique at base, serrate or dentate; flowers hypogynous, bisporangiate, fragrant, cream-color, in cymes, the peduncle adnate for part of its length to a large bract; perianth regular; sepals and petals 5; a staminode opposite each petal; stamens many, sometimes united basally in 5 groups; carpels 5, united; ovary 5-loculed, 2 ovules in each locule; style 1; fruit indehiscent, pubescent, 1-2-seeded.

Other species of *Tilia* cultivated on the OSU Campus are Littleleaf Linden (*T. cordata* Mill., Chadwick Arboretum #3), Mongolian Linden (*T. mongolica*, OSU Campus Trees #45), and Silver Linden (*T. tomentosa* Moench, OSU Campus Trees #14).

a Leaf-blades glabrous except for axillary tufts of hairs beneath; bracts glabrous. 1. *T. americana*

a' Leaf-blades pubescent beneath with dense white (or brownish) stellate hairs; bracts pubescent on lower side.

#### 2. *T. heterophylla*

### 1. *Tilia americana* L.

Basswood, Linden

Forest tree; under surface of leaves glabrous but may be hairy along veins. Syn.: *T. glabra* Vent., incl. †*T. neglecta* Spach

REFERENCES: Riddell 1834:117; Sullivant 1840:13; Craig 1890:71 (on the campus, along the river, and in the woods where there are several specimens; many of the trees planted on the campus a few years ago have been broken down by the wind and several have died and been replaced; where sheltered it grows quite large and makes a fine shade tree; 15 Jul 1882, 24 Jun 1887); Selby & Craig 1890:8; Braun 1961:269 (illus. p. 268); Cooperrider 1995:99 (illus. p. 100).

HERBARIUM RECORDS: [date?—Olentangy R., *W. Green*; Jun 1888—Cols., *Craig*; 6 Jul 1892—Cols., *Werner*, 8 & 16 Sep 1982—Scenic Nature Preserve, Highbanks Metro Park (Franklin & Delaware Cos.), ravine & floodplain, *Brauning 314 & 315*; 18 Sep 1982—Scenic Nature Preserve, Highbanks Metro Park, (Franklin & Delaware Cos.), floodplain, *G. Moore 316*; 1983—Blendon Woods, *Owens*; 1 Jul 1986—Highbanks Metro Park (Delaware Co.), best on dry shale bluffs, *Kasko*; 23 Jun 1991—E bank of Scioto R., James J. Thomas Park, N of Fishinger Rd., Perry Twp., *Lowden 4729*.

### 2. †*Tilia heterophylla* Vent.

White Basswood

Tree; leaf blades pubescent beneath with dense white stellate hairs.

HERBARIUM RECORD: 1834—Worthington, *Paddock Collection* (ILL).

NOTE: Not mapped for Franklin Co. by Braun 1961:270 or Cooperrider 1995:101 (illus. p. 100).

## MALVACEAE, Mallow Family

Herbs or shrubs; often stellate-pubescent; leaves alternate, simple usually palmately veined; flowers hypogynous, bisporangiate or monosporangiate; sepals 5, separate, or united at base, frequently subtended by a circle of bracts; corolla regular; petals 5, separate or nearly so; stamens many, the filaments united in a sheath around the style or