

General Notes on the Genera Solidago, Eupatorium and Aster

Based on lecture by Rod Simmons for Maryland Native Plant Society on 26 September 2006

Collated by Karyn Molines

Eupatorium

Leaves usually opposite or whorled

Heads mostly small in corymb-shaped or paniced clusters

Receptacle flat or conical

Achenes usually 5-angled attached to a pappus with a single row of slender bristles

Solidago

Leaves usually sessile

Stems erect, usually un-branched

Heads small and numerous, borne on panicles or racemes

Phyllaries stiff, not fused

Receptacle small, flat or slightly convex

Achenes nearly cylindrical, attached to pappus of equal slender bristles

Aster

Leaves simple, alternate

Heads many, in corymbs, panicles, or racemes

Involucral bracts in 2 or more rows

Receptacle flat or slightly convex

Pappus of fine bristles

Joe Pye Weeds

Eupatorium...

dubium (*Eupatoriadelphus dubius* (Willd. ex Poir.) King & H. Rob.): [Coastal Plain Joe Pye Weed] damp, sandy soils of the Coastal Plain; rough stems and leaves, bright pink-purple flowers

fistulosum (*Eupatoriadelphus fistulosus* (Barratt) King & H. Rob.): [Trumpetweed] wide range throughout MD; stem hollow, glaucous, smooth

maculatum (*Eupatoriadelphus maculatus* (L.) King & H. Rob.): [Spotted Trumpetweed] extirpated, historically in the Mountains

purpureum: [Sweet Scented Joe Pye Weed] uncommon along the Fall Line, usually in rich, rocky woods; relatively small plant, stem smooth with dark purple nodes, pale flower

Bonesets and Thoroughworts

Eupatorium...

perfoliatum: [Common Boneset] wide range, leaves appear to be joined and pierced by the plant stem

pilosum: [Rough Boneset] Coastal Plain, indicative of seepage bogs, long hairs on stem, long purplish-green leaves with rounded teeth (similar to Vervain)

sessilifolium (syn. *E. vaseyi*): [Upland Boneset] west of Fall Line; stem and leaves glabrous, leaves sessile and lightly serrated

godfreyani: [Godfrey's Thoroughwort] stem and leaves pubescent, large leaves similar to *E. pubescens* but much longer than wide

rotundifolium: [Roundleaf Thoroughwort] stem and leaves pubescent, toothed obovate leaves about as long as wide; Coastal Plain and sandy soils; syn. *E. pubescens* open woods and edges in Fall Line and Piedmont

album: [White Thoroughwort] sandy soils of the Coastal Plain; roughish leaves, generally longer than wide; bracts with transparent margins

hyssopifolium: [Hyssopleaf Thoroughwort] dry, old fields; lower leaves entire; hirsute; less common

serotinum: [Lateflowering Thoroughwort] common in urban and disturbed areas, increasing in abundance; long petiole, acuminate tip; very fragrant

altissimum: [Tall Thoroughwort] common in diabase communities, sessile leaves more narrow than *E. serotinum*, toothed only on upper half of leaves; very tall

aromaticum (syn. *Ageratina aromatica*): [Lesser Snakeroot] rare, found on serpentine and diabase soils; blueish leaves generally smaller and pointier than *E. rugosum*

rugosum (syn. *Ageratina altissima*): [White Snakeroot] common in Piedmont and Mountain regions; smooth; very white flowers

coelestinum (syn. *Conoclinium coelestinum*): [Blue Mistflower] found along stream banks and in wetlands; purple flowers

Goldenrods

Solidago...

arguta: [Atlantic] rare in Piedmont and Mountain regions; Rocky woods; larger basal leaves and larger teeth than *S. juncea*

bicolor: [White] dry woodland and edges whitish-pale yellow flowers; large rough leaves

caesia: [Blue-stemmed or Wreath] woodlands, especially rocky or gravelly slopes; ; smooth, glaucous, dark stem

canadensis var. *canadensis* [Canada]: apparently absent from Piedmont and Mountain regions; smooth stem and leaves

canadensis var. *scabra* [Tall] (syn. *S. altissima*): very common, increasing in abundance; very tall; rough with fine hairs

erecta: [Showy]

flexicaulis: [Zigzag] calcareous soils of the Piedmont and Mountain regions; smooth; large toothed, round leaves with a petiole

gigantea: [Giant] damp soils and wetlands throughout Maryland; tall, smooth, glaucous; similar to *S. canadensis*

juncea [Early]: common; glabrous basal leaves are toothed, long and tapering; reddish stems; fairly smooth

odora: [Sweet] sandy soils of the Coastal Plain; very smooth; crushed leaves smell like anise

puberula: [Downy] sandy soils of the Coastal Plain; stout; fine roughness on purple-red stem

rugosa var. *aspera*: [Rough] more likely in bogs of the Coastal plain; flower panicle “elm” shaped; really rough

speciosa var. *erecta* [Stiff] glabrous; stout; smooth leaves and green stem

uliginosa: [Big] bogs and seepage wetlands of Garrett County and Coastal Plain; similar to *S. juncea*; glabrous; flower panicle “club” shaped

ulmifolia [Elm-leaved]: rich woodlands and diabase forest in Piedmont; broad large leaves; smooth

Euthamia graminifolia: [Flat-topped] fragrant yellow flowers; narrow, entire leaves

var. *nuttalii* in Coastal Plain with much larger, more open flower head and much wider leaves

Aster (and current name)...

- cordifolius* (*Symphyotrichum cordifolium* (L.) G.L. Nesom): [Common Blue Wood] heart-shaped leaves
- divaricatus* (*Eurybia divaricata* (L.) G.L. Nesom): [White Wood] leaves heart-shaped to triangular. Young leaves are dark purple underneath
- dumosus* (*Symphyotrichum dumosum* (L.) G.L. Nesom) [Rice Button]: small; smooth; compact and tighter form
- ericoides* (*Symphyotrichum ericoides* (L.) G.L. Nesom) [heath] not in MD
- laevis* (*Symphyotrichum laeve* (L.) A. Löve & D. Löve): [Smooth] Western MD; calciphile; Hoyles Mill Diabase
- lateriflorus* (*Symphyotrichum lateriflorum* (L.) A. Löve & D. Löve): [Calico] common; dark disk flowers; flower branches horizontal
- nemoralis* (*Oclemena nemoralis* (Aiton) Greene): [Bog, Old Field or Greystem] upright; not much branching; smooth brown to purple stem with whitish grey hairs
- novae-angliae* (*Symphyotrichum novae-angliae* (L.) G.L. Nesom): [New England] wetlands; clasping leaves (auricled); rough, dark purple flowers
- novi-belgii* (*Symphyotrichum novi-belgii* (L.) G.L. Nesom): [New York] Coastal Plain; smooth sessile leaves; pale flowers
- pilosus* (*Symphyotrichum pilosum* (Willd.) G.L. Nesom): [Hairy White Old Field] old fields; largest and weediest of the top four; soft white hairs with open drooping panicles
- schreberi* (*Eurybia schreberi* (Nees) Nees): [Schreber's] similar to *A. cordifolia*
- simplex* (*Symphyotrichum lanceolatum* (Willd.) G.L. Nesom): [Tall White] common in wetlands and streams; tall; smooth; sometimes flower is blueish
- umbellatus* (*Doellingeria umbellata* (Mill.) Nees): [Parasol Whitetop] mountains and Suitland Bog
- vimineus* (*Symphyotrichum lateriflorum* (L.) A. Löve & D. Löve): [Calico] bottomlands; smooth stem; long skinny dark leaf—main vein pale

Mikania scandens: Coastal Plain wetlands, vine with toothed heart shaped leaves