

KEY TO
SOLANACEAE OF COLORADO (Nightshade or Potato Family)
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modified from Weber and Wittman, *Colorado Flora, Eastern Slope, 3rd Ed.*

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- 1a. Shrubs, often with thorns on older growth **Lycium**, desert-thorn
- 1b. Herbs and a climbing or scrambling perennial (2)
- 2a. Stems and leaves spiny **Solanum**, nightshade
- 2b. Stems and leaves not spiny (3)
- 3a. Corolla white, large, >5 cm long; fruit a spiny capsule **Datura**, thorn-apple
- 3b. Corolla various, <4 cm long; fruit not spiny (4)
- 4a. Corolla pale yellow with a network of purple veins, in a 1-sided spike; fruits in 2 rows; capsule
 circumscissile, the calyx much elongated at maturity **Hyoscyamus niger**, henbane
- 4b. Corolla and fruit not as above (4c)
- 4c1. Fruit a dehiscent capsule; corolla salverform or funnelform; plants glandular (5)
- 4c2. Fruit an indehiscent berry; corolla campanulate or rotate; plants non-glandular or glandular (6)
- 5a. Corolla white, >2.5 cm long, in a terminal panicle or raceme; stems erect; usually disturbed sites
 **Nicotiana attenuata**, coyote tobacco
- 5b. Corolla purple, <1 cm long, solitary in leaf axils; plants prostrate; shorelines
 **Calibrachoa parviflora**, seaside petunia
- 6a. Anthers opening by terminal pores or slits; stamens often connivent around the style; corolla lobes often
 longer than the tube; calyx not covering the fruit except in two spiny species; peduncles arising between the
 leaf nodes or opposite the leaves, not in leaf axils **Solanum**, nightshade
- 6b. Anthers opening lengthwise; stamens not connivent; corolla lobes shorter than the tube; calyx covering all or
 most of the fruit; plants never spiny; peduncles arising in the leaf axils (7)
- 7a. Mature calyx closely fitted over most of the fruit, but the top of the fruit exposed; corolla whitish or yellowish
 green, sometimes marked with purple, rotate **Chamaesaracha**, five eyes
- 7b. Mature calyx forming an inflated lantern over the fruit; corolla color and shape various (8)
- 8a. Mature calyx lobes nearly distinct, separated for most of their length, auriculate (cordate) at base; corolla blue
 to nearly white; ovary 3– to 5-celled; annual ornamental possibly escaped
 **Nicandra physalodes**, apple-of-Peru
- 8b. Mature calyx lobes joined for most of their length, not auriculate; corollas purple or yellow; ovary 2-celled (9)
- 9a. Flowers yellow, nodding; pubescence of hairs or none; seeds minutely pitted **Physalis**, ground cherry
- 9b. Flowers purple, erect; pubescence of white vesicles; seeds honeycombed
 **Quincula lobata**, purple-flowered ground cherry

CHAMAESARACHA

- 1a. Plants pubescent with simple and glandular hairs **C. conioides**, gray five eyes
- 1b. Plants sparsely pubescent, often with stellate or branched hairs **C. coronopus**, greenleaf five eyes

DATURA

- 1a. Capsules erect; foliage glabrous; corolla 5-10 cm long **D. stramonium**, jimsonweed
- 1b. Capsules nodding; foliage finely puberulent; corolla ≥ 10 cm long **D. wrightii**, sacred datura

LYCIUM

- 1a. Stems spreading, arching and/or recumbent; corolla purple, the tube 3-7 mm long; leaves glabrous, narrowly oblong; berry salmon-red, not glaucous **L. barbarum**, matrimony vine
- 1b. Stems upright-branching; corolla greenish or purple-tinged, the tube 15-20 mm long; leaves glaucous, oblong-elliptic; berry red to reddish-blue, glaucous **L. pallidum**, pale wolfberry

PHYSALIS

- 1a. Fruiting calyx with 5 sharp folds, the calyx teeth acuminate; annual; corolla 6-7 mm long, bluish-spotted; anthers bluish; foliage with capitate glandular hairs; plants rare
..... **P. foetens** var. **neomexicana**, New Mexican ground cherry
- 1b. Perennial (rhizomes are deep); inflated calyx not sharply folded; corolla larger; anthers yellow (2)
- 2a. Plants grayish from a dense covering of short hairs; some hairs forked or stellate
..... **P. hederifolia** var. **cordifolia**, ivy-leaved ground cherry
- 2b. Plants with all unbranched hairs or glabrous (3)
- 3a. Plants with glandular hairs, pubescence usually dense; leaves broadly ovate (4)
- 3b. Plants without glandular hairs, some nearly glabrous; leaves lanceolate or narrowly ovate (5)
- 4a. Corolla limb often reflexed when fully open; flowering (not fruiting) pedicels usually 3-8 mm long; leaves usually < 5 cm long and < 3.5 cm wide; few stem hairs > 0.5 mm long; anthers < 3 mm long
..... **P. hederifolia** var. **comata**, round-leaf ground cherry
- 4b. Corolla limb usually not reflexed when fully open; flowering (not fruiting) pedicels 10-15 mm long; leaves often larger; many stem hairs > 1 mm long; anthers ≥ 3.5 mm long **P. heterophylla**, clammy ground cherry
- 5a. Calyx minutely strigose, chiefly in 10 narrow, longitudinal stripes; hairs mostly < 0.5 mm long; leaves glabrous or minutely hairy only on the main veins
..... **P. longifolia**, long-leaved ground cherry (Weber and Wittman include this in **P. virginiana**)
- 5b. Calyx covered over its entire surface with spreading septate hairs 0.5-1.5 mm long; leaves sparsely hairy on both sides (6)
- 6a. Hairs of upper stem mostly retrorse (pointed downwards) **P. virginiana**, Virginia ground cherry
- 6b. Hairs of upper stem stiff, ascending or appressed **P. pumila** subsp. **hispida**, prairie ground cherry

SOLANUM

- 1a. Plants spiny, leaf pubescence stellate (2)
- 1b. Plants unarmed, pubescence not stellate (5)

- 2a. Anthers dissimilar, one much larger and darker; taprooted annuals (3)
- 2b. Anthers all alike; rhizomatous perennials (4)

- 3a. Corolla yellow; herbage densely stellate pubescent, not glandular; common **S. rostratum**, buffalo-bur
- 3b. Corolla violet; herbage sparsely stellate pubescent, glandular; rare **S. heterodoxum**, melonleaf nightshade

- 4a. Leaves and stems with a dense, scurfy, stellate pubescence; leaves lanceolate; corolla blue to lavender
..... **S. elaeagnifolium**, silver-leaf nightshade
- 4b. Leaves and stems green; leaves broadly ovate and very coarsely lobed, with scattered stellate hairs; corolla
white to lavender; one record..... **S. carolinense**, horse-nettle

- 5a. Leaf blades deeply lobed and pinnatifid (6)
- 5b. Leaf blades entire or merely toothed (8)

- 6a. Leaf blades deeply pinnatifid with acute, triangular segments **S. triflorum**, cut-leaf nightshade
- 6b. Leaf blades with broad, rounded lobes (7)

- 7a. Corolla purple; plant a somewhat woody vine, climbing over other plants and fences; leaves entire or with
basal lobes **S. dulcamara**, climbing nightshade
- 7b. Corolla white; low herb with small, round tubers; leaves pinnately compound with 5-11 leaflets
..... **S. jamesii**, wild potato

- 8a. Leaves glabrous or finely pubescent; mature berries black; calyx remaining small, not covering part of the
berry at maturity **S. americanum**, american black nightshade
- 8b. Plants hirsute or glandular-villous; mature berries green to yellow to brownish; calyx at maturity covering the
lower part of the berry **S. physalifolium** var. **nitidibaccatum**, viscid nightshade, hairy n.