

drooping, rather few in each cluster: involucre glabrous, purplish or pale green; larger bracts of the outer involucre ovate or triangular-ovate; inner bracts glabrous, about as long as the pappus: corollas pale yellow or whitish: achenes 4-6 mm. long: pappus light brown.

In woods and thickets, Maine to Pennsylvania and North Carolina. Summer and fall.

7. *Nabalus cylindricus* Small. Perennial, deep green. Stems 3-9 dm. tall, nearly simple, glabrous, finely ridged, each topped with a narrowly cylindrical panicle: leaf-blades triangular or ovate-triangular in outline, 5-10 cm. long, acute or acuminate, 3-lobed or 3-cleft and sinuate or angularly toothed, truncate or cordate at the base, lower ones on long slender petioles, the upper shorter-petioled: heads in axillary clusters, thus forming a narrowly cylindrical panicle: involucre narrow, about 10-11 cm. high; inner bracts linear or linear-lanceolate, with few scattered hairs, slightly shorter than the pappus: achenes 5-6 mm. long, glabrous.

On mountain slopes, Kentucky to North Carolina and Tennessee. Fall.

8. *Nabalus virgatus* (Michx.) DC. Perennial, glabrous, glaucescent. Stems 6-12 dm. tall, wand-like: leaf-blades various, those of the basal and lower stem-leaves 1-3 dm. long, sinuate-pinnatifid or pinnately parted; segments entire or toothed; blades of the upper leaves gradually smaller and narrower, entire, sessile: panicle narrow and raceme-like, 2-5 dm. long, sometimes much reduced: involucre about 10 mm. high; inner bracts linear, glabrous: ligules white or pink: achenes about 4 mm. long, brown: pappus straw-colored. [*Prenanthes virgata* Michx.]

In pine lands, New Jersey to Florida. Fall.

9. *Nabalus asper* (Michx.) T. & G. Perennial, sometimes scabro-pubescent. Stems erect, 1-2 dm. tall, narrowly branched above: leaf-blades oblong to lanceolate or elliptic, 4-20 cm. long, irregularly often sharply toothed, sessile, sometimes slightly clasping: involucre 12-14 mm. high: bracts linear or small, outer ones linear-subulate, all more or less distinctly hirsute: ligules cream-colored, often fully 1 cm. long: achenes 5-6 mm. long: pappus sordid brown or pale straw-colored. [*Prenanthes aspera* Michx.]

On dry prairies, Minnesota, south to Kentucky, Kansas and Louisiana. Summer and fall.

10. *Nabalus crepidineus* (Michx.) DC. Perennial, minutely pubescent or glabrate. Stems 1-2 m. tall, branching above: leaf-blades varying from hastate at the base of stem to ovate-hastate or oblong above, 1-3 dm. long, gradually or abruptly narrowed into winged petioles, coarsely and irregularly dentate: involucre about 12 mm. long; bracts linear; copiously strigose-hirsute on the back, the outer triangular lanceolate to linear-lanceolate: ligules ochroleucous: achenes 4-5 mm. long, 12-15-ribbed, 4 or 5 ribs stronger than the rest: pappus dirty brown. [*Prenanthes crepidineus* Michx.]

In rich soil and thickets, Minnesota to Pennsylvania, Tennessee and Kansas. Summer and fall.

2. *HIERACIUM* L.

Perennial, caulescent or scapose herbs, with pubescent, often glandular, or rarely glabrous foliage. Leaves sometimes all basal: blades simple, entire or toothed. Heads solitary, or in corymbs, racemes or panicles, yellow, or orange or red. Involucre various, often double; inner of narrow bracts in 1-3 series, outer abruptly or gradually smaller. Receptacle flat, naked or slightly fimbriate. Ligules truncate and toothed at the apex. Anthers sagittate at the base. Stigmas slender. Achenes oblong, fusiform or columnar, 10-15-ribbed, truncate or narrowed into a neck. Pappus of 1-2 rows of brown or rarely white bristles. HAWKWEEED.

Stems regularly leafy to the broad, more or less effuse panicle: leaf-blades not of a spatulate type.

Blades of the lower leaves narrowed at the base: involucre 4-5.5 mm. high: achenes columnar, 2 mm. long. 1. *H. paniculatum*.

Blades of the lower leaves subcordate at the base: involucre 7-9 mm. high: achenes fusiform, 3 mm. long. 2. *H. Floridanum*.

Stems more or less scape-like, corymbose or narrowly cylindrical-campanulate above: leaves mainly basal, or on the lower part of the stem, some of the lower blades of a spatulate type.

A. Achenes columnar.

Longer involucral bracts glabrous or nearly so.

Pappus shorter than the involucre.

Pappus surpassing the involucre.

Stems nearly naked, glabrous: peduncles glabrous or sparingly glandular-pubescent.

Stems leafy and pubescent at least below: peduncles densely glandular-pubescent.

Longer involucral bracts copiously pubescent.

Pappus shorter than the involucre.

Pappus longer than the involucre.

a. Stems scape-like, glabrous to the inflorescence.

3. *H. Scribneri*.

4. *H. venosum*.

5. *H. Marianum*.

3. *H. Scribneri*.

6. *H. Greenii*.