

Carex echinata. (A) Pistillate scales, (B) perigynia, (C) achenes, (D) inflorescences.
A through C: Left-dorsal view; right-ventral view.

SYNONYM: C. muricata L.
HABIT: Densely tufted. Culms: 1-6 dm tall, equaling to exceeding the leaves, somewhat aphyllopodic.

LEAVES: All borne on the lower part of culm. Blades: Elongate, slender, light green, 1-3.3 mm wide. Sheaths: Thin, hyaline ventrally, slightly thickened, and shallowly concave at the mouth.

BRACTS: Lowest small and inconspicuous to setaceous-prolonged, sheathless; upper reduced and scale-like.

SPIKES: 3-6, green, turning to brown, clustered to remote, forming an elongated to oblong head. Terminal: Gynaecandrous. Lateral: Gynaecandrous or wholly pistillate; perigynia $5-15$, crowded, widely spreading to deflexed at maturity.

PISTILLATE SCALES: Broadly ovate, acute or cuspidate at the tip, shorter and narrower than the perigynia, hyaline or scarious, brownish tinged, greenish along the firm midvein.

PERIGYNIA: Lance-triangular to lance-ovate, plano-convex, thin-walled or subcoriaceous with abundant spongy tissue at the base, sharp edged, serrulate distally, green or tan, $1.6-3.5(4.0) \mathrm{mm}$ long, $0.8-2 \mathrm{~mm}$ wide. Nerves: Few to many dorsally, few or absent ventrally, prominent on the margins. Beaks: Slender, abruptly tapered, greener than the body, bidentate, 1.1-1.6 mm long.

ACHENE: Ovate, lenticular, substipitate, golden yellow at maturity, 1.1-1. 6 mm long, $0.8-1.3 \mathrm{~mm}$ wide. Stigmas: 2.

HABITAT AND DISTRIBUTION: Swamps, sphagnum bogs, and other wet places from sea level to moderate elevations. Circumboreal. In North America extending south to central Oregon and California and east to Utah, Colorado, Wisconsin, and North Carolina. May-August.

SIMILAR SPECIES: C. echinata-Perigynium beak slender; longer (1.1-1.6 mm long), equaling the body, thin-walled, bidentate; style slender. C. interior-Perigynium beak broader and shorter ( $0.5-1 \mathrm{~mm}$ long), thick-walled, very shallowly bidentate; style stout.

