

# *Mitchella repens* L.

**Standardized Common Name:** Partridge Berry

**Other Common Names:** Checkerberry, Squaw Vine

**Family:** Rubiaceae

**Taxonomy:** *Mitchella repens* is one of two species in its genus, and is endemic to northern North America. The other species, *M. undulata* Sieb. & Zucc., is southeast Asian.

**Description:** Perennial herb, woody at base with narrow creeping rhizomes. Stems prostrate, weak, producing adventitious roots, branching, quadrangular or flattened. Leaves evergreen, opposite, petiolate, with tiny stipules, broadly ovate, 5–20 mm long, leathery; base broad and rounded-truncate to rounded or slightly cordate; apex obtuse; upper surface glossy dark green, sometimes variegated with white, the lower surface pale green. Inflorescences terminal, 2- or rarely 1-flowered, ovaries of the 2 flowers fused. Calyx lobes 8 or fewer per pair of flowers, triangular, irregular, interspersed with small irregular toothed appendages. Corolla white, sometimes purple-tinged or rarely pink, tubular; tube 9–15 mm long, often with 4 vertical splits in the lower portion; lobes 4 (rarely 3–6), ovate, 3–4 mm long, reflexed at time of flowering; inner surface pubescent. Flowers heterostylous (stamens may be either much longer or much shorter than style). Stamens 4, filaments partly fused to petals.

Ovary inferior, 4-loculed, each locule 1-seeded; fused ovaries of paired flowers develop into a single 8-seeded fruit. Fruit a drupe, red or rarely white, 7–10 mm in diameter, fleshy, with persistent calyx teeth, usually containing 8 pyrenes; flesh dry and tasteless.

**Parts in commerce:** Whole herb (stems with adventitious roots, leaves, and flowers or fruits)

## **Identification:**

### *Stems and leaves*

- Stems slender, weak, branching, barely pubescent or glabrous, the main stems prostrate and thin but woody, often somewhat flattened, sometimes producing adventitious roots
- Roots originating singly or in small clusters, short, slender, branching, yellowish brown
- Leaves evergreen, leathery, opposite
- Leaves 5–20 mm long, broadly ovate to nearly round, widest near the base
- Leaf base rounded-truncate to rounded or slightly cordate
- Venation pinnate

- Upper leaf surface dark green, glossy, sometimes with variegated pattern or whitish over midrib and veins; lower surface pale green
- Taste slightly bitter, astringent

#### Flowers

- Inflorescences 2-flowered, ovaries of flowers fused (rarely 1–4-flowered)
- Calyces of flowers fused below (sometimes completely), cup-shaped with small irregular teeth
- Corollas tubular, 9–15 mm long, 4-lobed (rarely with 3–6 lobes each, or two corollas entirely fused; lower portion of tube may have 4 inconspicuous vertical slits)
- Corolla lobes ovate, 3–4 mm long, curved backwards
- Corolla whitish, rarely pinkish or purple-tinged
- Inner surface of lobes and corolla pubescent
- Some plants have a short style and 4 (3–6) long stamens protruding from corolla; others have a protruding style and short stamens
- Filaments fused to corolla tube below
- Stigma 4-branched

#### Fruits

- Fruit a drupe, scarlet (rarely white), 7–10 mm in diameter, usually broader than long, containing usually 8 irregularly shaped pyrenes
- Fruit bearing persistent calyx teeth in two rings at apex (or one ring when calyces were completely fused)
- Fruit flesh dry and tasteless

Inflorescences may vary in number of flowers, number of flower parts, or degree of fusion; atypical flowers may appear otherwise normal or may be grossly irregular.

#### References:

Blaser JLeC. The morphology of the flower and inflorescence of *Mitchella repens*. *Amer J Bot.* 1954;41:533–539.

Holm T. Rubiaceae: Anatomical studies of North American representatives of *Cephalanthus*, *Oldenlandia*, *Houstonia*, *Mitchella*, *Diodia*, and *Galium*. *Bot Gaz.* 1907;43:153–186.

Robbrecht E, Puff C, Igersheim A. The genera *Mitchella* and *Damnacanthus*. Evidence for their close alliance; comments on the campylotropy in the Rubiaceae and the circumscription of the Morindeae. *Blumea.* 1991;35:307–345.

Youngken HW. *Text-Book of Pharmacognosy*, 5<sup>th</sup> ed. Philadelphia, PA: The Blakiston Company; 1943:834–835.

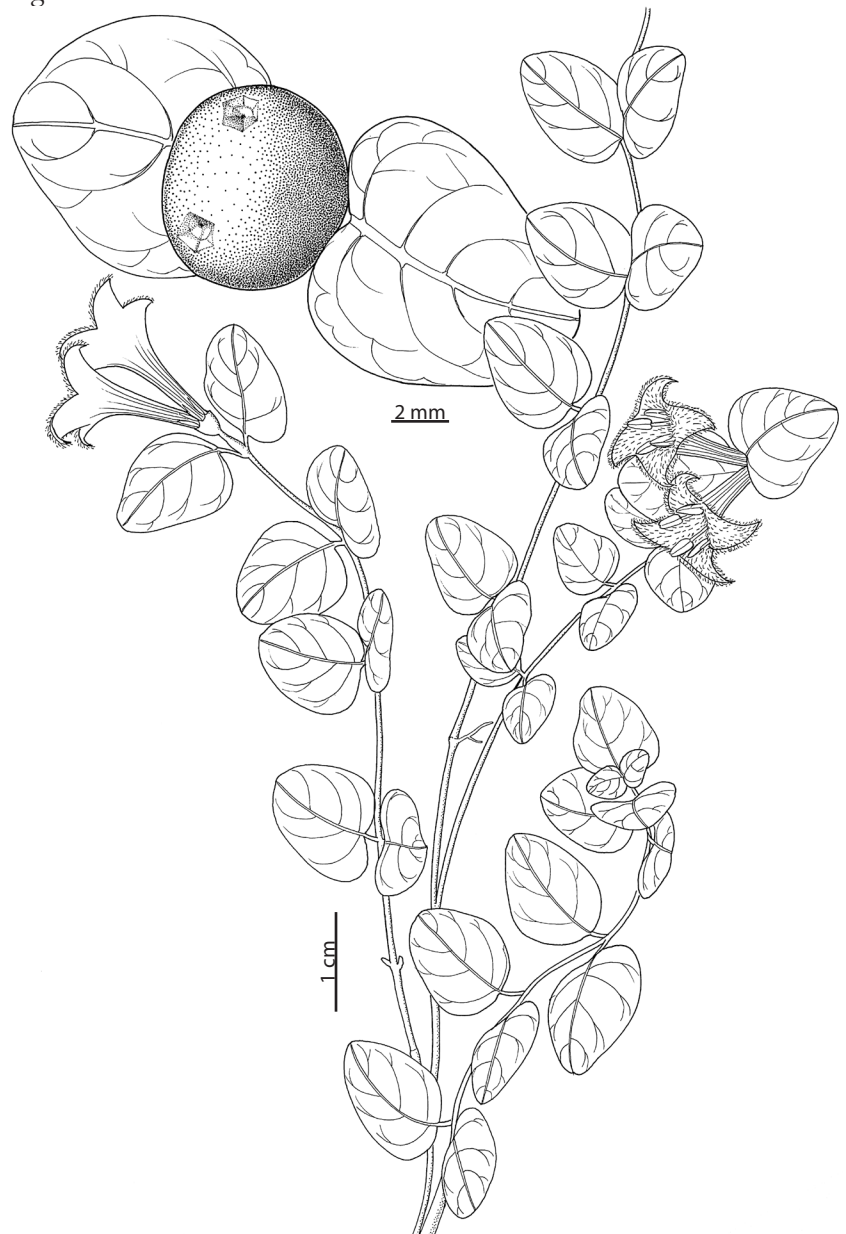


Figure 48: *Mitchella repens*.