# Mitchella repens

A lthough it is a small and creeping herb, the jewellike beauty of partitige berry rewards attentive naturalists year round.

Partridge berry is a low-growing herbaceous perennial that forms mat-like colonies of interlaced stems on the forest floor. Near their growing tips, stems are smooth, or sparsely hairy when young; in older colony sections, stems bear adventitious roots. Branch stems arise either singly or in pairs, frequently from nodes below a previous year's fruit, but sometimes from other nodes as well. The 1-2 cm long leaves are opposite evergreen, round to ovate, and somewhat leathery; the upper surface is glossy, with a whitish mid-vein. Successive pairs of leaves are off-set by 90 degrees from the pair above and below, but this decussate arrangement is often obscured in older, fully prostrate, stems. Small, sharp-pointed stipules extend between petiole bases on each side of the nodes. Typically, flowers form in pairs at the ends of slightly upturned stem tips. The paired flowers share a common pedicel and exhibit various degrees of fusion with each other, especially in their lower regions. There are four scale-like sepals at the base of each flower but these commonly fuse together forming a common calvx for the pair of flowers. Four white petals form a gradually expanding corolla tube that ranges from 9 to 14 mm in length and is topped by spreading lobes that are 3-4 mm long and densely hairy on their inner surfaces. Rarely, corollas of adjacent



flowers also fuse together. There are four stamens alternate with and attached to the petals. Relative lengths of stamens and styles vary from plant to plant, a condition known as distyly. In some flowers the pollen-bearing anthers are included within the corolla tube and the four strap-like stigmas extend beyond the petal lobes. In other flowers, the stamens protrude and the stigmas are hidden inside the tube. At the base of the corolla tube a ring-like nectary sits atop the inferior ovary. Ovaries of adjacent flowers coalesce to form a red berry-like fruit, 7-10 mm in diameter, containing up to eight seeds, and capped by the persistent scale-like sepals. Rarely, white fruits are found.

The genus name, Mitchella, commemorates John Mitchell (1711-1768), colonial era physician and naturalist from Grbanna, Virginia. Repens denotes the plant's creeping stems and adventitious roots. Mitchella is classified in the madder family. Rubiaceae, and is therefore related to other Virginia native (plants such as bluets (Houstonia), button-bush (Cephalanthus), bedstraws (Galium) and a host of familiar tropical plants, including coffee (Coffea), (quinine (Cinchona), and ipecac (Carapichea, formerly Cephaelis). The only other species in the genus, Mitchella undulata, from Taiwan, Korea, and Japan, is similar to our North American plant.

Although edible, partridge berries are described as tasteless or, at best, mildly aromatic. Native American women consumed tea from the leaves and fruits to treat a variety of obstetric and gynecological conditions. Other sources assert additional medicinal properties, including calming of nerves and easing of gastrointestinal conditions. Ethnomedicinal use is noted here solely for historical interest; no endorsement of alleged medicinal virtues of partridge berry is intended.



### ... In the Wild

Mitchella repens is a woodland plant that can be found in moist bottomlands as well as somewhat drier ridge tops. In Virginia, flowers begin to open in May, and continue sporadically through the summer. Bumblebees pollinate the flowers. Cross-pollination, required for seed-set, is controlled by factors that permit pollen germination from long-anthers only on the stigmas of different flowers with long styles; conversely, pollen from short anthers dan germinate only on the stigmas of different flowers that have short styles. Fruits mature in the fall and are retained through the winter and spring. Ruffed grouse, bobwhite quail, turkey, skunks, and white-footed mice consume partridge berries.

### ... In the Garden

Partridge berry is an excellent plant for the wood-land garden. The glossy evergreen leaves are attractive year-round and, although small, the flowers and fruits add interest through multiple seasons. *Mitchella* does best with some shade, even moisture, and mildly acidic soils; it does well, for example, among acid-loving shrubs. Partridge berry makes an interesting subject for a shaded rock garden; it is also a popular inclusion in a terrarium. It can be grown from seed; fall-collected seeds should be cleaned of fruit pulp and moist stratified for 6 weeks to enhance germination. However, ease of rooting makes vegetative propagation the favored option; softwood cuttings can be taken in the spring or summer.



### ... Where to See

Partridge berry is widespread in eastern North America, from southern Canada to Florida, and west to Minnesota and eastern Texas; additional populations are known from the mountains of southern Mexico and Guatemala. It is found throughout Virginia.



Map source: http://vaplantatlas.org/index.php?do=about:virginia\_botanical\_associates

### ... Conservation

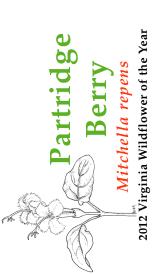
A Ithough partridge berry is both widespread and relatively abundant, individual populations may be threatened by collection of wild plants for horticultural purposes, encroachment by invasive exotic plants and habitat destruction.

Gardeners should not collect partridge berry in the wild and should be certain that all native plants purchased for home gardens are nursery-propagated, not wild-collected. For a list of retail sources of nursery-propagated plants and responsibly collected seeds, visit www.vnps.org; send an SASE to the **Virginia Native Plant Society**, Blandy Experimental Farm, 400 Blandy Farm Lane, Unit 2, Boyce, VA 22620; e-mail vnpsofc@shentel.net; or call 540-837-1600.

To see and learn more about interesting species of plants native to Virginia, visit the VNPS website at www.vnps.org where you can also find the chapter nearest you and learn of upcoming meetings and wildflower walks in your area.

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# Partridge Berry

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2012 Virginia Wildflower of the Year



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