

**Botanic name :** *Marsilea quadrifolia* L.

**Common name :** Four leaf clover, European waterclover

**Family :** Marsileaceae (Division: Pteridophyta)

**Habitat :** Aquatic fern

**Distribution :** Eurasian nativity; distributed in Indian subcontinent, Afghanistan, China, Japan, and Vietnam, Caucasia, Central and southern Europe particularly, many of the major river valleys, such as the Loire, Po and parts of the Danube

**Description :** Aquatic evergreen perennial herb with dense stands, or has a random growing pattern; grows in aquatic environments from creeping, fleshy, roots containing rhizome; clumps of leaves up to 15 – 20 cm tall at intervals along rhizome. Thin green procumbent petiole rises from the rhizome to the water surface, each stalk bearing a single shamrock-like leaf with four wedge-shaped leaflets; sporocarps (spore-producing tissues) thick, grow on 1—12 mm stalks near the petiole; about 1.3--1.7 mm thick, with a distal tooth of 0.3--0.6 mm long.

**Phytochemicals:**  $\beta$ -carotene, tannins, alkaloids, saponins, steroids, phytosterols, polyphenols, anthraquinones, terpenoids, flavonoids

**Medicinal/Economic uses :** Extensively used in the Ayurvedic System of Medicine since 3000 years for curing several ailments such as cough, psychiatric diseases, eye diseases, diarrhea and skin disease, bipolar disorder, bronchitis, diabetes, The sporocarp of this plant species are rich in starch content and its paste forms the prime nutritious food of mulching cattle. Young leaves and stem are cooked and used as famine food only used at the time of scarcity. A juice made from the leaves is diuretic and febrifuge. It is also used to treat snakebites and applied to abscesses. Plant is anti-inflammatory, diuretic, depurative, febrifuge, refrigerant, etc. The plant is useful in nutrient mitigation from the fresh water of lake and for wetland restoration.