



# NYMPHAEA

## Fam. Nymphaeaceae

### DESCRIPTION

Perennial aquatic plants whose buds are either submerged or floating, with a root system that anchors them to the bottom. The average height of these plants depends on the depth of the water body; however, they rarely exceed two metres.

### FRUITS

The fruit is an orbicular, leathery and spongy berry whose ripening, following withering, triggers the dissemination of numerous ellipsoidal seeds, with a smooth surface.

### LEAVES

The leaves are broad, with a rather leathery texture. They have a flat blade with the petiole inserted towards the centre of the blade in a narrow and deep groove. They normally float on the water surface but sometimes they protrude from the surface about 10-20 cm. The shape is roundish and the length of the petiole depends on the depth of the water. The upper blade is covered by a waxy layer, whilst the lower blade may contain substances such as anthocyanin which converts the rays of sunlight into heat. The leaves have ribs that radiate from the central nerve and at the edge of the leaf.

### HABITAT

Native to Asia, this plant, today, has a cosmopolitan distribution. It includes coarse species that have perfectly adapted to temperate climates as well as tropical species with very fragrant, nocturnal flowering, especially in the Northern hemisphere.

### DISTRIBUTION

Grown for ornamental purposes throughout the Italian territory. It should be noted that only one species is present in the Italian spontaneous flora (*Nymphaea alba*).

### FLOWERS

The inflorescence is formed by large, generally isolated, floating flowers. Normally the flowers last long and open during the day only in clear skies. The flowers are hermaphroditic, polypetalous (with a varying number of petals) and spirally (the petals are arranged in spirals). The flower can be white, pink, red, purple, light blue and yellow or intermediate colours. Flowering usually occurs between spring and early summer. Pollination occurs through flies.

### ROOTS

Rhizomatous roots, anchored to the muddy bottom.

### STEM

The stem (i.e. its submerged part) is fleshy, rhizomatous, almost tuberous. It is different from the aerial stems of terrestrial plants; in fact, it presents minimal woody parts, largely replaced by the aeriferous tissues necessary to ensure floating. Generally, the stems are flaccid but tenacious and are marked by the scars of the petioles of previous years.

### INTERESTING FACTS

Water lily extracts are used in the pharmaceutical industry as they are renowned for their medicinal properties. They are also used in cooking – the flowers are edible – and, in China, they are used to flavour tea.

