

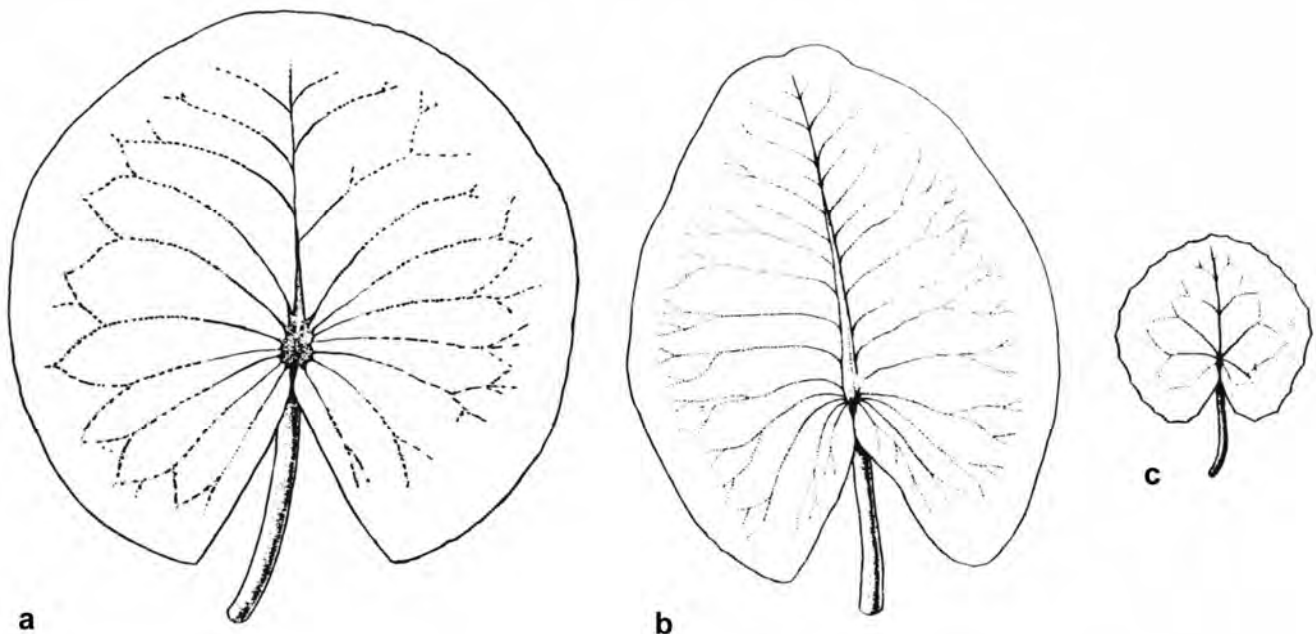
NUPHAR / NYMPHAEA / NYMPHOIDES, VEGETATIVE

AND FRUITING MATERIAL

When there are no flowers, the genera of water-lilies can still be separated by either leaves or fruit capsules, which are frequently washed up on the shoreline.

Leaves

- 1 Lateral veins of leaves arranged \pm like a herring bone, branching dichotomously (the branches sub-parallel and separate from each other; Fig. a); petiole angled (trigonous in *N. lutea*, compressed in *N. pumila*); thin translucent underwater leaves present *Nuphar*
- 1 Lateral veins mostly radiating from the point of insertion of the petiole, breaking into a reticulum towards the edge of the leaf; petiole terete; translucent underwater leaves absent 2
- 2 Leaves 4-30 cm, the margin entire or at most slightly wavy, the basal lobes rounded or more or less angled (Fig. b); leaves all arising from the base; lower side of leaf without brownish dots *Nymphaea*
- 2 Leaves 2-14 cm, the margin slightly scalloped, the basal lobes rounded (Fig. c); leaves arising from the base, or from long trailing stems where they are often grouped; brownish dots present on lower side of leaf *Nymphoides*



Leaves (a) *Nymphaea alba*, (b) *Nuphar lutea*, (c) *Nymphoides peltata*. Not to scale.

Plant Crib

Fruits

Nuphar: Fruit capsules flask-shaped or pear-shaped, the surface smooth or slightly ridged, topped by a receptacular disc with radial stigmatic ridges.

Nymphaea: Fruit capsules \pm globose, the surface covered with transverse scars left by the petals and stamens, topped by a receptacular disc with radial stigmatic ridges.

Nymphoides: Fruit capsules ovoid with an acute apex prolonged into a beak.

Author N. F. Stewart, February 1988, revised 1997.