

Rumex crispus L.

Standardized Common Name: Yellow Dock

Other Common Names: Curled Dock, Dock

Family: Polygonaceae

Taxonomy: *Rumex* includes about 200 species, which are distributed worldwide and are often weedy. Hybridization among species can occur; hybrids between *R. crispus* and *R. obtusifolius* L. have been termed *R. xpratensis* Mert. & Koch. The recent *Flora Europaea* treatment recognizes three slightly different subspecies, of which only subsp. *crispus* is widespread.

Description: Perennial herb with a thickened taproot. Leaves cauline and in a basal rosette; stem to 1.2(–1.5) m tall, usually unbranched. Leaves in rosette usually ascending to nearly erect, long-petioled, oblong to lanceolate, 20–30(–35) cm long; upper leaves smaller, lanceolate, with short petioles; base rounded to subcordate, or sometimes cuneate to truncate especially in stem leaves; apex acute; margins strongly crenate, undulate and crisped; venation prominent, especially the midrib. Inflorescence a narrow open panicle of dense racemes, mostly terminal, with smaller panicles in axils of upper leaves, bracteate with leaflike bracts. Flowers small, borne on long pedicels, perfect or unisexual and the plants monoecious; tepals 6, the outer 3 remaining small, the inner 3 enlarging in fruit; stamens 6; ovary 1, 3-styled, 1-ovuled. Fruit an achene surrounded by thin wings formed by enlarged tepals; wings forming a cordate or deltoid shape, 3–6(–8) mm long, reticulate-veined, all 3 or only 1 with a tubercle; achene ovate, angled, brown, shiny, 1.3–2.5(–3.5) mm long.

Parts in Commerce: Rhizome and root

Identification:

- Up to 35 cm long, upper rhizome portion up to 7 cm in diameter, producing 1 to several tap roots up to 2 cm thick
- Roots cylindrical, tapering, often somewhat twisted, seldom branching
- Dark and often reddish brown
- Upper portion of rootstock (rhizome) bearing occasional circular scars, sometimes with stem remains or buds; stems hollow, often purplish
- Roots longitudinally wrinkled over entire surface when dry, bearing numerous small, often transversely elongated rootlet scars and occasional rootlets
- Rootlets thin, usually sparse except around rhizome, the thicker ones mostly confined to the upper portion
- Fracture short, dusty, sometimes splintery
- Inside of root yellow to whitish
- Root in cross section has thin brown cork layer; yellowish ring of cortex and phloem, sometimes thick but tending to shrivel irregularly on drying; sometimes brownish cambium; large yellowish wood with narrow interrupted xylem rays separated by broader parenchyma rays (vessels are very large and may be seen in cut surface with dissecting scope)
- Rhizome has a central pith
- Roots grown in very wet conditions may contain intercellular air spaces in parenchyma
- Taste astringent, bitter

Adulterants: Adulteration is not reported to be a problem, but it is questionable whether substitution of related species would be noticed. Insufficient data on root morphology in this genus are available to determine which species might be indistinguishable substitutes. Several species have similar medicinal uses, of which the most common is *R. obtusifolius* L. (Broad-Leaf Dock or bitter dock, also sometimes called yellow dock). The roots of *R. obtusifolius* frequently branch near the apex, and have more persistent rootlets than *R. crispus*; the bark is usually very dark, but sometimes may be yellowish-brown.

References:

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