

# *Potamogeton crispus*

## Curly pondweed

### Introduction

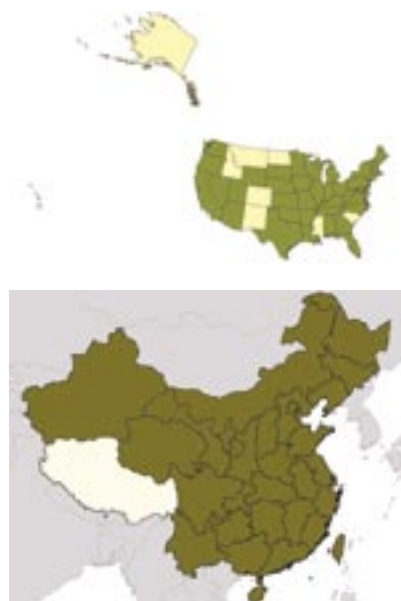
There are approximately 90 species of the genus *Potamogeton* worldwide. Twenty six species have been reported in China with a nationwide distribution<sup>[3, 4]</sup>.

### Taxonomy

- Order: Helobiae
- Suborder: Potamogetonineae
- Family: Potamogetonaceae
- Genus: *Potamogeton* L.
- Subgenus: Potamogeton
- Species: *Potamogeton crispus* L.

### Description

*Potamogeton crispus* is a submerged freshwater perennial. It has a terete to slightly flattened rhizome. The stems are sparingly branched, also terete to slightly flattened and angular, and creeping at the base. The stiff axillary turions are 1-3 cm long and 8-15mm wide. Leaves are sessile, broadly linear to narrowly oblong, 3-8 cm long and 3-10 mm wide, mostly undulate or crispate, with serrulate margins, and obtuse or rounded apices. Stipules are 5-10 mm long, convolute to shortly connate, membranous and evanescent. Inflorescences are cylindrical spikes composed of 2-4 whorls of opposite



### Species of *Potamogeton* in China<sup>[3]</sup>

Scientific Name	Scientific Name
<i>P. acutifolius</i> Link	<i>P. manchriensis</i> (A. Benn) A. Benn.*
<i>P. alpinus</i> Balb. <sup>I</sup>	<i>P. natans</i> L.
<i>P. amblyophyllus</i> C. A. Meyer	<i>P. nodosus</i> Poir.
<i>P. compressus</i> L.*	<i>P. obtusifolius</i> Mert. & Koch
<i>P. crispus</i> L.	<i>P. octandrus</i> Poir. <sup>III</sup>
<i>P. cristatus</i> Rgl. & Maack	<i>P. oxyphyllus</i> Miq.
<i>P. distinctus</i> A. Benn. <sup>II</sup>	<i>P. pamiricus</i> Baag.
<i>P. filiformis</i> Pers.	<i>P. pectinatus</i> L. <sup>IV</sup>
<i>P. gramineus</i> L.	<i>P. perfoliatus</i> L.
<i>P. intortifolius</i> J. B. He et al.	<i>P. polygonifolius</i> Pour.
<i>P. lucens</i> L.	<i>P. praelongus</i> Wulf.
<i>P. maackianus</i> A. Benn.	<i>P. pusillus</i> L.
<i>P. malaianus</i> Miq.	<i>P. recurvatus</i> Hagstrom

<sup>I</sup>recorded as *P. heterophyllus* Schreb. in *FRPS*

<sup>II</sup>recorded as *P. fontigenus* Y. H. Guo et al. in *FRPS*

<sup>III</sup>recorded as *P. hubeiensis* W. X. Wang in *FRPS*

<sup>IV</sup>recorded as *P. leptanthus* Y. D. Chen and *P. nanus* Y. D. Chen in *FRPS*

\*listed in the revised *FOC*

flowers borne on peduncles up to 5 cm in length. Carpels are 4-merous, shortly connate at the base. Fruits are ovate, 3.5-4 mm long; with a significant dorsal keels that are sparsely dentate on the lower ridge. The beak is slender, nearly equal to or longer than the body of carpel. Flowers and fruits appear from April through July<sup>[4]</sup>.

### Habitat

*P. crispus* occurs in lakes, streams, ponds, reservoirs, paddy fields less than 2 m in depth<sup>[4, 7]</sup>. It also occurs in

freshwater marshes at elevations of 2300 m in Qinghai, northwestern China<sup>[6]</sup>, and 570-2300 m in Yunnan<sup>[7]</sup>.

### Distribution

*P. crispus* reportedly occurs nationwide in China with the exception of Tibet.

### Economic Importance

*P. crispus* is regarded as green manure, and as a forage plant for fish and livestock<sup>[1, 3]</sup>, as well as a common aquatic weed. It is also host to some aquatic insect pests<sup>[5]</sup>. Like many aquatic plants, *P. crispus* serves as a spawning habitat

for fish and shrimp in the early spring when flowering occurs<sup>[7]</sup>.

### Related Species

*P. malaianus* Miq., similar to *P. crispus* in appearance, is petiolate, with an undulate or distinctly serrulate margin, 7 or more veined. *P. malaianus* occurs

in still or slowly running water and paddy fields. It is also a nationally distributed aquatic weed<sup>[2, 4]</sup>.

### Natural Enemies of *Potamogeton*

One arthropod species has been recorded as associated with plants of genus

*Potamogeton*. One aquatic beetle, *Donacia provosti* Fairmaire (Coleoptera: Crioceridae), is mentioned in association with *Potamogeton*<sup>[5]</sup>.

### Arthropods

Order	Family	Species	H. R.	Ref
Homoptera	Aphididae	<i>Rhopalosiphum nymphaeae</i> (L.)	po	[8]