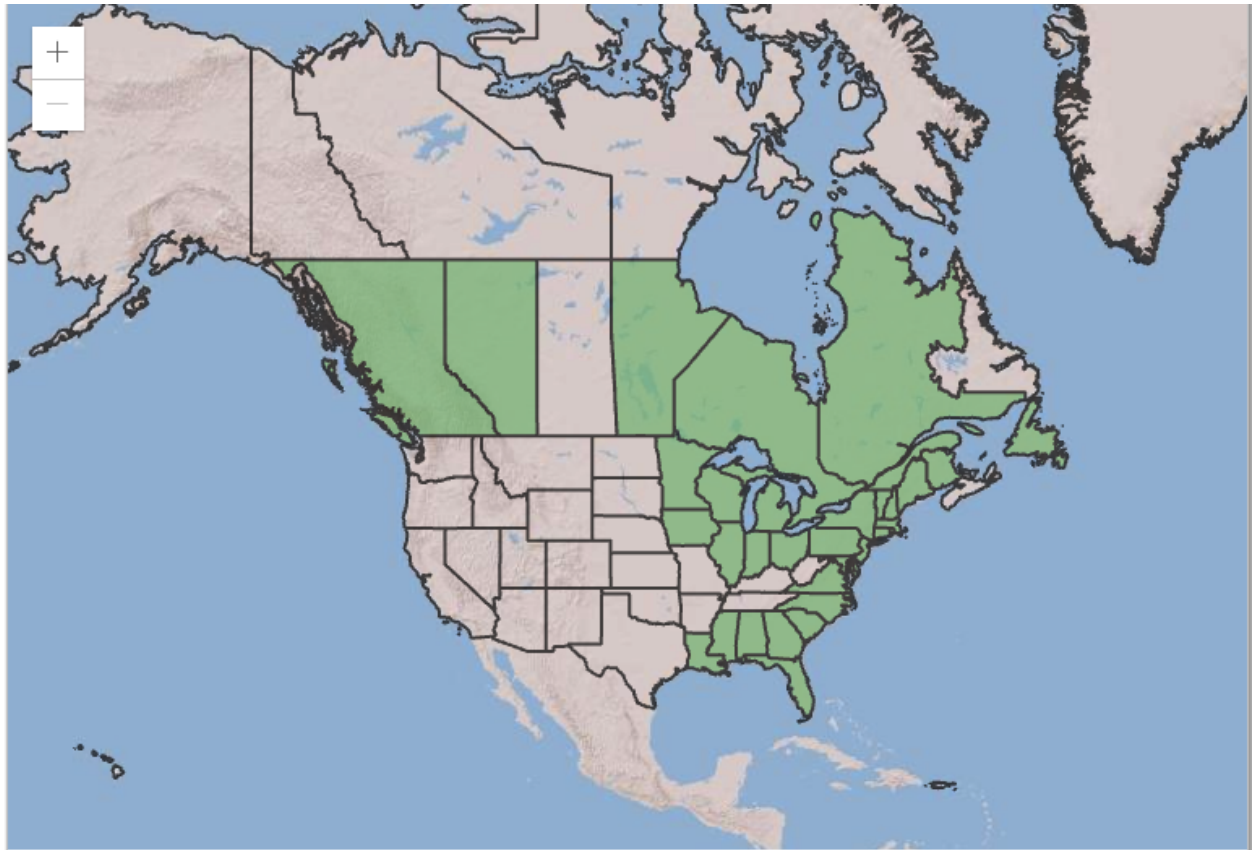


Plant Propagation Protocol for *Zizania aquatica*

ESRM 412 - Native Plant Production

URL: <https://courses.washington.edu/esrm412/protocols/> [2022] [ZIAQ.pdf]



TAXONOMY	
Plant Family	
Scientific Name	<i>Poaceae</i> or <i>Gramineae</i>
Common Name	Grass Family
Species Scientific Name	
Scientific Name	<i>Zizania aquatica</i>
Varieties	Brevis
Subspecies	<i>Zizania</i>
Cultivar	No information

Common synonyms	No information
Common name(s)	Annual wild rice, Southern wild Rice, Indian rice
Species Code	ZIAQ

General Information	
Geographical range	Atlantic and Gulf Coastal Plain, Eastern Mountains and Piedmont, Great Plains, Midwest, Northcentral and Northeast, part of the Pacific Northwest such as British Columbia.
Ecological distribution	Able to tolerate annual precipitation of 3.5 to 11.6 dm, annual temperature of 6.9 to 12.5 degrees celsius, and 4.9 to 8.5 pH. Found along fresh to brackish river shores and shallow water of lakes and rivers. Requires slow flowing water, and in no more than 0.6 m of water.
Climate and elevation range	It is a hydrophyte and often occurs in wetlands. (5) No information on elevation range.
Local habitat and abundance	It is grown in the Eastern half of the United States and in areas of Canada such as British Columbia.
Plant strategy type / successional stage	Annual, robust, erect, aquatic or paludal, monoecious grass
Plant characteristics	Culms tall, erect, to 3 meters tall, hollow with transverse walls. Leaves flat, to 1 meter long, 4 cm wide. Leaf-markings purple, with thick midribs often nearer one margin than the other. Flowers cross-fertilized and wind-pollinated, in large, open, terminal panicles to 40 cm long. Pistillate flowers enclosed by two glumes, the outer one larger, awned and toward the axis, clustered on upper erect portion of panicle, opening before male flowers which are on lower portion; staminate

	flowers on spreading branches consisting of two glumes enveloping six bright yellow stamens; male and female flowers range from white to purple; spikelets one-flowered, with long stiff twisted barbed awns; kernels (seed) closely adhering to thin brown hull, shallow-grooved the entire length of one surface, long, nearly cylindrical, 1.2–1.9 cm long, about 0.7–1 mm wide, purplish-black when ripe. Roots slender, fibrous, penetrating shallowly; some adventitious roots present.
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Propagation protocol for production of <i>Zizania aquatica</i> L. by Carol C. Baskin.	
Ecotype	No information
Propagation Goal	Plants
Propagation Method	Seed
Product Type	Container (plug)
Stock Type	No information
Time to Grow	0
Target Specifications	No information
Propagule Collection Instructions	No information
Propagule Processing/Propagule Characteristics	Seed dormancy is physiological dormancy
Pre-Planting Propagule Treatments	Seeds were cold stratified for 182 days. Seeds germinate at 5 degrees C
Growing Area Preparation / Annual Practices for Perennial Crops	No information
Establishment Phase Details	No information
Length of Establishment Phase	No information
Active Growth Phase	No information
Length of Active Growth Phase	No information

Hardening Phase	No information
Length of Hardening Phase	No information
Harvesting, Storage, and Shipping	No information
Length of Storage	No information
Guidelines for Outplanting / Performances on Typical Sites	No information
Other comments	No information

Information Sources	
References (full citations)	See below
Other Sources Consulted (but that contained no pertinent information) (full citations)	See below
Protocol Author	Dalton Harper
Date Protocol Created or Uploaded	05/02/2022

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