Oryza sativa



Family: Poaceae

Common name: Red rice, weedy rice

Geographical distribution:

Latin name: Oryza sativa L.

Asia: Japan and Korea.

South and Southeast Asia: Bangladesh, India, Indonesia,

Malaysia, Pakistan, Philippines, and Vietnam.

Rest of the world: widespread in North and South America.



(Weedy rice is highly variable and can be a serious weed at direct seeded rice.)

Morphology:

A variable, erect, stout or slender annual rice with varying height and form.

Stem: tufted, erect, hollow and slender or stout, smooth and hairless, 80-120cm tall.

Leaf: blade flat with parallel veins, 15-30cm long; ligule and auricle present; ligule usually 10-20 mm long

Inflorescence: an erect or nodding loose panicle, spikelet about 7mm long, flat, one flowered, with or without awns of varying length.



Biology and ecology:

Weedy rice is highly variable and thought to originate from outcrosses to wild species (O. nivara, O. rufipogon) or as a result of outcrossing within domestic rice. It is distinguished by the key weedy traits of ready panicle shattering and variable secondary dormancy. It is highly adapted to a wide range of environmental conditions, dryland to deep-water culture. It commonly possesses red pericarp, which requires additional milling, thereby reducing the quality of milled rice.

Agricultural importance:

Weedy rice is a major weed in direct seeded rice. It reduces rice yields and is an alternate host of rice insects, diseases, and nematodes. Often spread by contaminated rice seeds.

Management

Cultural control: the use of crop seed free from wild rice, crop rotation, soil puddling, hand weeding of initial infestations, and water management are possible components of an integrated approach to control weedy rice. Established infestations will need to be addressed through the use of stale seedbeds or water seeding or transplanting.

Chemical control: the application of glyphosate before land preparation or seeding reported to be effective.







Assam Agribusiness and Rural Transformation Project (APART)