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University of Arkansas System



## Barnyard grass (*Echinochloa colona*; *Eichnocloa crus-galli*)

### Description

- *Barnyard grass* is an annual tropical wild grass which grows in warm and damp areas. The genus *Echinochloa* consists of about 50 weed species, mainly found in the tropics, particularly in rice growing areas of Asia and Africa.
- The grass grows up to 2 m long (see figure A below).
- The inflorescence varies in color, from pale white to brown (see figure B below) and the reproduces through seed.
- Individual plants produce up to 40,000 seeds per year.
- The seed is dispersed by water, birds, insects, machinery, and animals feet and contaminated rice seed .

### Distribution

- The weed is a fodder crop in several parts of the world, including Africa. It is therefore easily introduced into new areas.
- In East Africa, the grass is present in all rice growing areas.

### Damage on rice crop

- The grass is ranked among the most damaging weeds of paddy rice globally.
- It acts as a weed by competing with rice for water, nutrients and light.
- When it grows in a rice field, it consumes up to 80% of the available nitrogen, hence the main crop (rice) shows symptoms of nutrient deficiency.
- Yield decline due to deficiency of important soil nutrients.



Fig 1. Barnyard grass in rice field and inflorescence



F.G 2. Mature inflorescence of Barnyard grass

Source: [www.feedipedia.org](http://www.feedipedia.org)

### Management Strategies

#### 1. Cultural control:

- Use of clean seed: avoid use of rice seeds contaminated with Barnyard grass seed.
- Manual/mechanical weeding to remove weeds from the rice fields as early as possible, and before they flower.
- Early flooding of up to 2.5 cm from planting to dough stage of rice to suffocate seed.
- Use of clean (weed-free) farm machinery to prevent seed dispersal by farm implements.

#### 2. Chemical control:

- Effective herbicides such as SATUNIL (40% thiobencarb w/w +propanil 20% w/w); applied at 2.5 L/ha.

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