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AfricaRice
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Red Sprangletop (*Leptochloa chinensis*, L.)

Description

- Sprangletop is a perennial grass which grows in swampy lands.
- The grass is characterized by erect tufted stout plants which grow up to 1.5 m. Spikelets have between 3 and 7 purple flowers.
- It reproduces by both seeds and vegetatively ,
- The plant has many highly branched inflorescences with a panicle of 15-60 cm. Each inflorescence has the potential of producing hundreds of seeds
- The grass cannot germinate under 5 cm water (as in transplanted rice fields) but can germinate in saturated soil, and will survive later flooding to 5 cm. Hence it is able to germinate and establish successfully along with direct-sown rice. Seed exhibits up to 40% dormancy 8 months after maturity

Distribution

- Red Sprangletop is widespread in rice growing areas of East Africa. In Kenya, the weed was abundantly found in Mwea at a frequency of 97% in farms.

Damage on rice crop

- Sprangletop is a serious weed of many cultivated crops
- The weeds compete for water, light and nutrients
- Sprangletop seeds are frequent contaminates of rice
- In some countries, grain yield losses up to 44% has been reported



Fig 1. A red sprangletop infested field. Stalks with inflorescence is shown inset.

Management Strategies

1. Cultural control:

- Use of clean seed: avoid use of rice seeds contaminated with Sprangletop grass seed.
- Manual/mechanical weeding to remove weeds from the fields as early as possible, and before rice flowers
- Early flooding of up to 5 cm from planting to dough stage of rice to suffocate weed seeds.
- Use of clean (weed-free) farm machinery to prevent seed dispersal by farm implements.
- Avoid direct seeding of rice. Grow rice through seedling transplant method.

2. Chemical control:

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

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