

Weeding practices in rice

Introduction

Weeds are a major production constraint in rice production (*refer to weeds factsheets for further information*); and weeding is commonly practiced for their management. Various weeding methods can be practiced in rice fields:

1. Manual weeding:

(i) Hand weeding

- Involves hand removal of weeds. Weeds removed are heaped outside the field, and can be composted or fed to livestock.
- Hand weeding is labour intensive, time consuming and tedious.
- Hand weeding is eco-friendly because no chemicals are utilised.



Fig 1. Hand weeding in a rice field
Source: Rice knowledge bank IRRI, 2019

(ii) Hand hoeing:

- Involves using a hoe to remove weeds. The rice field is dried up prior to hand hoeing to prevent re-establishment of the weeds.
- Hand hoeing is possible only in line-planted rice.
- Hand hoeing is eco-friendly because no chemicals are utilised.
- It is an effective method for controlling difficult weeds. This method is used in combination with hand weeding to remove weeds that are within plants along the rows.
- Hand hoeing takes shorter time than hand weeding.



Fig 2. Hand hoeing in a rice field
Source: Rice management portal, 2019
<http://www.rkmp.co.in/>

2. Mechanical

Manually operated rotary

- This involves using a rotary weeder between the rows of rice plants. This method of weeding is only possible in line-planted rice.
- The field is first irrigated to make the soil soft and allow for easy movement of a rotary weeder along the rows. The rotary weeder can be adjusted to desired spacing and depth.
- The rotary weeder is pushed along the rows to uproot and bury weeds under the water.
- Rotary weeding is effective for young weed, and is more efficient than manual weeding.
- This method of weeding is eco-friendly because no chemicals are utilised.



Fig 3. Rotary weeding in a rice field
Source: Rodale institute, 2019