















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 lineplanted 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 utised.



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

Contact experts: Kimani, J (john.kimani@kalro.org), Wandera, F; Thuranira, D., Wasike, V., Otipa, M., Kega, V., Nyamongo, D., Magoti, R., Ochieng, V., Kirigua, V., Wasilwa, L., Wayua, F., Mugambi, C., Ndungu, J., Too, A., Ngari, B., Musila, R., Esilaba A.O. BILL & MELINDA Mutiga, S (ILRI-BeCA); Nyongesa, O (IRRI), Zhou, B (IRRI); Mitchell T. (OSU); Wang, G. L (OSU); Were, V (TSL); Ouedraogo, I (INERA); Rotich, F (UoEm); Correll, J. C. (UARK) and Talbot, N. J. (TSL). E-Guide for Rice Production in East Africa (2019)





