

## BRRRI CONFERENCE

# Proper weed management can increase crop yield

MA KASHEM

Proper implementation of eco-friendly, sustainable and integrated weed management in field crops can increase 18-22% yield in national level, which can contribute in total food production of Bangladesh. This was revealed at a discussion meeting organized on the occasion of the sixth conference of Weed Science Society of Bangladesh (WSSB) held at Bangladesh Rice Research Institute (BRRRI) in Gazipur on Saturday. Around 400 researchers from different organizations, (NGOs) and agricultural universities attended the conference. Dr Md Giash Uddin Mian, vice-chancellor, BSMRAU, was present as chief guest while the special guests were Dr Abul Kalam Azad, Director General of BARI, Dr Md Ansar Ali, Director (Administration and Common Service) of BRRRI, Dr F H Ansarey, Managing Director and Chief Executive Officer of ACI Ltd. The keynote paper was presented by Dr Md Khairul Alam Bhuiyan, General Secretary of WSSB and Senior Scientific Officer of BRRRI Agronomy Division.

Weed management is an essential intercultural part of field crops. Weed competes with crops for light, nutrients and water. As a result yield of field crops reduces up to 80-90%. In Bangladesh improper weeding causes rice yield loss that ranges 40-50% in rice, 24-24-58% in wheat, almost 49% in maize, 43% in potato, 20% in sugarcane, 75-80% in jute, 9% in tea and 25-60% in other crops.

On the present situation, farmer usually practices weeding with hand, hoe, mechanical weeder and chemical weeding with herbicide. Hand weeding in field crops is costly, need more money and time consuming. Mechanical weed control is not so much popular due its unavailability and timely effectiveness.

In case of hand weeding it needs 10000 to 18000 Tk/ha depending on crops. Now farmers are more interested with chemical weed control with herbicide. Herbicide adoption is increasing day by day due to its quick effectiveness and low cost. But improper herbicide application may causes environmental hazards and may disturb field ecosystem.

In this conference about 19 scientific papers from different research organizations were presented. The researcher of the conference discussed developing innovative approaches, economic and eco-friendly weed management technologies to address challenges ahead for sustainable agriculture and other social benefits. From the research papers it was observed that crop yield could be increased significantly if proper weed management could be done with integrated approach. However, in future emphasis should be given on mechanical and biological weed control.

Researcher concluded that low cost weed control measure should be adopted to increase economic gain. Herbicide should be applied in proper time and dose, and advanced level research should be carried out about the impact of different groups of herbicide in crop-soil-system. Research should be strengthened on mechanical and biological weed control to avoid the hazards of crop environment as well as the ecosystem. At this conference, a future research programme was undertaken for eco-friendly and sustainable weed management practices that will impact total food production and sustainable development goals in Bangladesh.

*The author is a technical editor and Head of Publications and Public Relations Division at BRRRI.*

# Weed management holds key to boost food production by 22pc

Yields of food crops can potentially be increased up to 22 percent provided proper weed management is put in place.

Experts said this at the 6th conference of Weed Science Society of Bangladesh (WSSB) held at Bangladesh Rice Research Institute (BRRRI) in Gazipur on Saturday, said a press release.

"Proper implementation of eco-friendly, sustainable and integrated weed management in field crops can increase 18-22% yield in national level, which can contribute in total food production of Bangladesh," stated the BRRRI release.

Weed competes with crops for light, nutrients and water thereby resulting yield loss of field crops up to 80-90 percent in worst cases. In Bangladesh improper weeding causes yield loss that range in between 40 to 50 percent in rice, 24 to 58 percent in wheat, almost 49 percent in maize, 43 percent in potato, 20 percent in sugarcane, 75-80 percent in jute, nine percent in tea and 25 to 60 percent in other crops.

In current practice farmers usually do weeding by hand, hoe, mechanical weeder and chemical weeding with herbicide. Hand weeding in field crops is costly, need more

money and time consuming. Mechanical weed control is not so much popular due to its unavailability and effectiveness, said the press release.

In case of hand weeding it needs Tk 10,000 to 18,000 per hectare depending on crops. Now farmers are more interested in chemical weed control with herbicide, said the BRRRI release adding that herbicide adoption is increasing day by day due to its quick effectiveness and low cost.

But improper herbicide application may cause environmental hazards and may disturb field ecosystem, weed management experts feared at the conference attended by 400 researchers from different organizations, NGOs and agricultural universities.

Dr Md Giash Uddin Mian, Vice-Chancellor of BSM-RAU was present as the chief guest while the special guests were Dr Abul Kalam Azad, Director General of BARI, Dr Md Ansar Ali, Director (Administration and Common Service) of BRRRI, Dr F H Ansarey, Managing Director and Chief Executive Officer of ACI Ltd.

WSSB General Secretary and Senior Scientific Officer of BRRRI Agronomy Division Dr Md Khairul Alam Bhuiyan presented

the keynote paper.

In this conference about 19 scientific papers from different research organizations were presented. They discussed about developing innovative approaches, economic and eco-friendly weed management technologies to address challenges ahead for sustainable agriculture and other social benefits. From the research papers it was observed that crop yield could be increased significantly if proper weed management could be done with integrated approach.

They suggested that, in future emphasis should be given on mechanical and biological weed control. Researchers concluded that low cost weed control measure should be adopted to increase economic gain. Herbicide should be applied in proper time and dose and advanced level research should be carried out about the impact of different groups of herbicide in crop-soil-system.

In this conference a future research programme was undertaken for eco-friendly and sustainable weed management practices that will impact total food production and sustainable development goals in Bangladesh. —UNB