



W03L03: Weed Management for ZT Crops

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Weed management in ZT crops

- ✓ What is weed?
- ✓ Agronomic management
- ✓ Different types of weeds
- ✓ Chemical control

What is Weed?

Any vegetation interfering crop production, competing with crop for natural resources, ultimately reduces productivity and quality of crop.

- Average yield loss – 30-35%
- Rabi- about 25 %
- Kharif- about 35-37%

Agronomic management for controlling weeds

- Use of healthy and clean crops seed
- Destroy the weeds before sowing
- Variety- initial fast growth
- Crop rotation and intercropping
- Irrigation method- prefer drip irrigation
- Mulching
- Solarization

Different weeds

- **Kharif**

- **Broad leaf** – Phylanthus, Euphorbia, celosia, Ageratum, Commelina
- **Narrow leaf** – Echinochloa, Digitaria, Cynodon, Eleusine

- **Rabi-**

- **Broad leaf-** Chenopodium, Anagallis, Convolvulus, Euphorbia, Rumax, Vicia, Melilotus
- **Narrow leaf-** Phalaris, Cynodon,, Avena, Polypogon

Sedges- Cyperus

Weed management in rice

Herbicides	Rate (a.i. gram/ha)	Product rate(g or ml/ha)	Application time
Pretilachlor	750	1500	2-4 Days after sowing
Bispyribac sodium	25	250	15-25 DAS for controlling BL, NL and sedges
Azimsulfuron	35	70	15-25 DAS, control BLW and Sedge
Halosulfuron	67	89	15-25 DAS, control BLW and Sedge
Ethoxysulfuron	18	120	25-30DAS, Control BLW and sedges

Weed management in wheat

Herbicides	Rate (a.i. gram/ha)	Product rate(g or ml/ha)	Application time
Pendimethalin	1000	3000	0-3 DAS
2,4-D Ethyl ester	400-600	1200	30-35 Days after sowing, BLW
Chlodinafop	60	400	30-35 Days after sowing, Narrow weed
Isoproturon	750-1000	1000-1250	30-35 Days after sowing, Narrow weed
Sulfosulfuron	25	33	25-30 DAS, control BLW and narrow

Weed management in maize

Herbicides	Rate (a.i. gram/ha)	Product rate (g or ml/ha)	Application time
Pendimethalin	1000	3000	0-3 DAS
Atrazine	750-1000	1500-2000	0-3 DAS
Temboatrione	120	349	15-25 Days after sowing, Grass and BLW
Halosulfuron	90	120	15-25 Days after sowing, Sedges and BLW

Weed management in pulses

Herbicides	Rate (a.i. gram/ha)	Product rate (g or ml/ha)	Application time
Pendimethalin	750-1000	2500-3000	0-3 DAS
Quazilofop ethyl	40-50	800-1000	15-25 DAS
Imazethapyr	40-60	400-600	30 DAS

Weed management in oilseeds

Herbicides	Rate (a.i. gram/ha)	Product rate (g or ml/ha)	Application time
Pendimethalin	750-1000	2500-3000	0-3 DAS
Quazilofop ethyl	40-50	800-1000	15-25 DAS
Imazethapyr	60-80	600-800	30 DAS, especially in soybean and groundnut
Imazethapyr + Imazamox	80-100	800-1000	25-35 DAS, especially in soybean and groundnut