

Technique of chemical control of Kans

Bundelkhand and Tarai region is worst affected by kans. This weed hinders the growth of crops in these regions and the crop yield is reduced. It also creates problems in sowing of kharif.

On the basis of tests performed by CSA Agriculture University, Kanpur and All India Integrated Weed Control Program at Crop Research Farm, Belatal, Mahoba, successful technique for control of this weed has been developed. In these experiments, glyfoset chemical has been found very useful. The details of this technique are given below:

(a) Control Technique

- At the onset of rainy season i.e., In July, apply deep plough. Then plough by disc plough so that the lumps are broken and rhizome of kans comes up and to some extent it is cut into pieces.
- Collect the stems so uprooted and burn them so that their vegetative production can be checked.
- If time is available, use leveler and leave the field empty.
- After 30-40 days of this process, when the new plants of kans is growing faster, apply foliar spray of glyfoset 41% at the rate of 3-4 liter dissolved in water per hectare through flat pan nozzle between mid August to mid September in open sun light. If the intensity of kans is very high, increase the quantity of chemical to 4 liter per hectare. It gives good result. After spray of this chemical, the color of the weed starts changing and the plant completely dry in next 15-20 days. The chemical reaches up to the stem of the weed and destroy it completely and prevents new plant to grow. If due to any reason, germination of kans is seen in the field, spray chemical again.

(b) Sowing of Crops

Crop can be sown after 1 month of application of chemical.

(c) Precautions

- Use chemical at the time of fastest growth of kans-35-40 days.
- After spray, 6-8 hours bright sun shine and sufficient atmospheric humidity is essential.
- Suitable time of spray is mid August to mid September.
- Wind should not blow faster at the time of spray.

Technique for chemical control of Motha

Motha (*Cyperus rotundus*) is a destructive weed. Its tuber is spread around 30-45 cm beneath the earth. Due to this tuber, it spreads faster. The menace of motha is intense in the crop grow in upper land. In the researches carried out under All India Integrated Weed Control Program in Department of Agronomy, CSA Agriculture University, Kanpur, glyfoset chemical has been found very useful. Method of its use is detailed below:

- Leave the field vacant where intensity of Motha is very high after the rain starts.
- Spray glyfoset 41% at the rate of 4 liter per hectare dissolved in 400-500 liter water between mid August to mid September when the growth of motha is very fast.
- All the weeds dry after 10-15 days of spray. If the growth of motha is seen again, repeat the spray as spot treatment.
- Leave the field vacant for one month after spray. All the weeds are destroyed in a month and effect of chemical on the soil is almost over. Then after sow next crop of toria, potato, wheat etc as per will.
- This process reduces the germination of motha by approximately 85-87% in the next crop.
- If required, apply spot treatment. Researches has proved that if dhaincha and til is grown in motha intense field continuously for 3-4 years, its intensity is reduced by 50-60%. Co cropping of lobia with maize, arhar and sugar cane also reduces the intensity of motha to a great extent.

Precautions in Use of Chemicals

- Suitable time of spray is mid August to mid September. At this time, motha grows faster and gets sufficient temperature and atmospheric humidity also.
- Spray in bright sun light. At least 6-8 hours sun light is essential after spray.
- Wind should not blow faster at the time of spray.

Control of Carrot Grass (Parthanium)

Menace of carrot grass is found mainly on road side and waste land. But sometimes, it appears growing with different crops i n cultivable land. The people can suffer from skim disease, asthma, tuberculosis and swellings when they come in contact with this grass. It adversely affects the animals also. Carrot grass is a national problem whose control is essential.

For its control, spray 4-5 liter of paraquant 24% solution dissolved in 700-800 liter water or 4-5 liter of glyfoset solution or 1.0 kg 2-4D sodium salt 80% wp dissolved in 500-600 liter water before flowering. If 2-3 kg of atrazine 50% wp per hectare dissolved in 500-600 liter water is sprayed, it checks the germination of carrot grass.

For control of carrot grass, zygigrama, vicholorata insect has been found effective. It the insects are spread over the plants in the month of July-August; they eat the plant and destroy them completely. More information can be obtained about this insect from Department of Entomology, Narendra Deo University of Agriculture and Technology, Kumarganj and National Weed Science Research Center, Adhartal, Jabalpur (M.P).