

# PREVENTIVE WEED CONTROL

- Weeds are naturally occurring plants in agricultural lands
- Any newly opened forest land has its characteristic weeds
- Changes in weed species diversity and richness are a result of multiplication of existing ones and the introduction of new ones into that habitat

# Definition

- **Preventive weed control** therefore refers to those measures necessary to stop the introduction of new weed species into a given geographical area as well as the multiplication and spread of existing weed species
- Its good prospects are based on the generally accepted wisdom that it is easier to prevent the spread of a weed to a new site than to get rid of it after it is well established

**“Prevention is better than cure”!**

**MEASURES**

# 1. Fallowing

- Definition

- Land that has lain a year or more untilled (uncultivated) or un-seeded, land that is ploughed without being sowed for a season or more

- Fallowing has traditionally been used by tropical farmers to get rid of certain unwanted vegetation

- It is an effective method of suppressing annual grasses and troublesome perennial weeds like *Andropogon* spp., *Pennisetum* spp. and *Cynodon dactylon*.



## 2. Preventing weeds from setting seed

- Weeds produce large amounts of seeds that end up in the seed bank in the soil
- **Post-harvest weed control is necessary to prevent these weeds from going to seed**
- This venture should be viewed as an investment whose dividends will be seen in the next season through reduced costs of weeding in the subsequent cropping.

# 3. Use of clean seed for planting

- Certified seed is weed free since the Plant Varieties and Seeds Act guards against infestation through legislation



# 4. Use of clean machinery

- Cultivation tools play a role in spreading weed seeds and vegetative perennating organs
- Weed seeds are 'accidentally' transported from weed infested fields to clean areas when machinery is used for mowing, transport, etc from one field to another.
- Routine sanitary measures involving careful cleaning of farm machinery immediately after use is an important preventive weed control practice.

# 5. Quarantine

- Accidental introduction of exotic plants and their propagules is one method of spreading weeds
- Quarantine is a voluntary or compulsory isolation, typically to contain the spread of something considered dangerous

# 6. Controlled livestock movement

- Seeds of many weeds that are spread by animals have hooks or barbs that enable them to cling to the hairs on animals as well as clothes of humans.



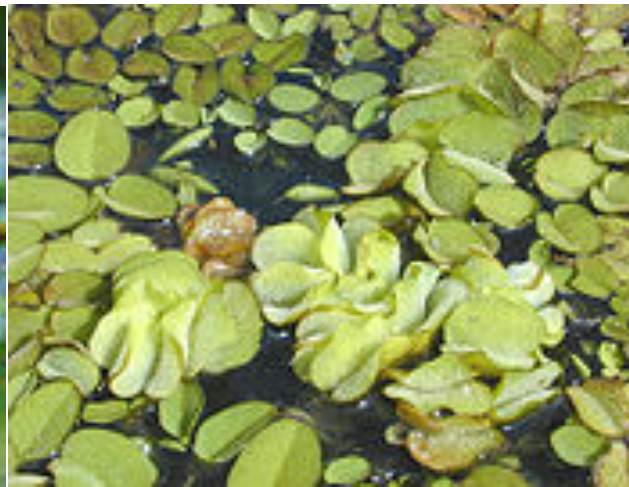
*Setaria verticillata* , *Ageratum conyzoides*,  
*Acanthospermum hispidum*



# 7. Screening irrigation water.

- This is particularly important for aquatic weeds.
- Irrigation canals should be screened to prevent weed seeds from being transported from infested fields to clean ones.

*Eichhornia crassipes*, *Salvinia molesta*,  
*Typha domingensis*



# 8. Proper manure composting

- Well decomposed manure is unlikely to contain viable weed seeds but poorly prepared manure is a potential source of weed seeds
- Care should be taken to ensure that the anaerobic processes involved in composting are taken full advantage of in preparing farmyard manure