

ICAR-INDIAN INSTITUTE OF WATER MANAGEMENT, BHUBANESWAR

Agro-Advisory to farmers under prevailing COVID-19 situation

(20th April to 4th May 2020)

1. The following water management practices and pest control measures have been suggested for better establishment and sustainable productivity of field and horticultural crops:

A) Field crops

- a) One light irrigation should be given at pod filling stage to *rabi* groundnut. If the crop is at maturity stage, irrigation should be stopped one week before harvest to hasten ripening.
- b) Spraying of KCl @ 1% for summer crops like groundnut, maize and sunflower to minimize terminal moisture stress.
- c) In *summer* sesamum, hoe the soil and top dress 15 kg urea/acre followed by one light irrigation of 5 cm using flexi pipe at 3-week stage of crop growth.
- d) In sugarcane, practice mulching using sugarcane trashes or other suitable locally available material and alternate furrow irrigation to save water.
- e) Application of pesticides like Imidacloprid, Fipronil, Chlorpyrifos is suggested to control termite damage in summer crops.
- f) Irrigate and maintain about 5cm of ponded water in *rabi* rice or *boro* rice as the crop is at flowering to milking stage and it is suggested to practice drainage of excess water from paddy fields during dough stage.
- g) Farmers should practice summer ploughing to reduce weed and enhance in-situ moisture conservation.

B) Vegetable and fruit crops

- a) Paddy straw mulching @ 5 to 10 t/ha for pointed gourd and spray Carbendazim (1.5 ml in 1 litre water) to control fungal wilt.
- b) Supplemental/life-saving irrigation from Water Harvesting Structures/Check Dams/Rubber Dams for summer vegetables like watermelon, cucumber, okra and cowpea.
- c) Soil application of Cartap hydrochloride @ 25 kg/ha to control fruit & shoot borer in brinjal.
- d) Apply 2g Chloromethanol or 2g Oxycarboxin in 1 litre of water to control rust disease in cowpea
- e) Apply *Trichoderma harzianum* or *T. viride* (25-50 g/plant), neem cake (250-500 g/ plant) or Carbofuran (50 g/ plant) in basin of root-knot infected guava trees.
- f) Thick mulch with coconut leaves (15 no.s) or any other material should be applied in the basin area (1.8 m radius) of coconut to conserve moisture.
- g) Farmers should stagger the harvesting of summer vegetables so as to minimize the price loss and post-harvest wastages.

h) Do not to use urban wastewater for irrigation of vegetable crops and harvested produce should not be washed with wastewater

2. Water management advisory for grow out fish culture:

- a) Non-availability of pellet or floating fish feed during lock down can be substituted by locally available rice bran, groundnut oil cake
- b) Fortnight application of RCD and lime to maintain plankton as natural feed in absence of supplementary feed.
- c) Key to water management: Avoid 4 'O's – over stocking, over feeding, over fertilizer and over medication.

3. Water management advisory for livestock:

- a) Animals should be provided with chaffed dry fodder (hey or bhusa) after soaking in water and they should be given enough drinking water.
- b) Persons handling animals and feed should clean their hands and wear masks.
- c) Livestock farmers are encouraged to produce durable milk products like, ghee during this lockdown period.
- d) Due to cessation of community grazing, the farmers are advised to utilize locally available ingredients like oilcakes, rice/wheat straw for animal feeding.

4. General advisory to farmers

- a) The water users' associations (WUAs) should carry out maintenance work of canal networks and lift irrigation points before onset of monsoon
- b) Farmers should avail agriculture cooperatives for input procuring and cooperative banks for short *kharif* loans.