



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****10th July, 2018**Imphal East

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th July, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6rd to 9th July, 2018) Observed 15.0 mm rainfall with mainly cloudy to overcast sky during past four days. Maximum temperature recorded ranged from 29.7 to 32.7 °C and minimum of 22.1 to 23.3 °C with mean relative humidity 90.3 % max and 64.8 % min was recorded in the past four days with average wind speed was 2.8 – 5.9 km/ hr.</p>	<p>Weather forecast for next five days of Imphal East (11th to 15th July, 2018) Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. 32-34 °C & minimum temp. 22-25 °C. Relative humidity may reach upto 100 % (max RH) & 63 % (min RH). The average wind speed may be 2-3 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Maturity to harvesting stage (Pre-kharif rice)		- Rice can be harvested when 80% of panicles turn hard & golden yellow. Over maturity should be avoided to reduce shattering losses. - After harvesting prepare the plot for double cropping; same variety or late variety may be grown. - Recommended rice varieties are RC Maniphou-13, RC Maniphou-7, RC Maniphou 10.
	Nursery and transplanting to tillering (Kharif rice)		- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days. - Seedling can be transplanted within 3 rd week of July (for late transplanting). - Weed control: Apply Butachlor @25kg/ha within one week of transplanting. - If the crop is in tillering stage, weeding may be done manually or by using conoweeder followed by top dressing with Urea@33kg/ ha
Kharif Maize	Vegetative		- For the crops in vegetative phase, weeding may be done before rain by hand or apply Simazine @ 0.75 kg a.i. / ha. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Vegetative to flowering		- Hand weeding should be done before 30-35 days after sowing soybean and groundnut. Also, earthing-up and thinning may be done after rains. - Monitor for insect pest infestation.
Blackgram/ Rice Bean	Vegetative		- Weeding may be done after rain if the weed population is high. - Monitor for insect pest infestation.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Citrus			Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 350 g Urea, 600 g SSP and 300 g MOP per tree in circular trench about 30cm from trunk.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraxnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/ lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb @ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Cauliflower	Nursery		- Sow cauliflower seeds (early variety). Apply 1-2 kg FYM/ m ² of nursery bed.



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“Gramin Krishi Mausam Seva”



(Early)			Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy straw.
Turmeric	Vegetative	Leaf Spot and leaf blotch	- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures against Leaf Spot and leaf blotch.
Colocassia	Vegetative	Leaf blight	- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.

Animal Sciences

* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Fungal Toxin	• Avoid consumption of feed with fungal growth.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Protect from thunder showers especially during night.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



MANIPUR BULLETIN

10th July, 2018

Imphal West

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th July, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6rd to 9th July, 2018) Observed 15.0 mm rainfall with mainly cloudy to overcast sky during past four days. Maximum temperature recorded ranged from 29.7 to 32.7 °C and minimum of 22.1 to 23.3 °C with mean relative humidity 90.3 % max and 64.8 % min was recorded in the past four days with average wind speed was 2.8 – 5.9 km/ hr.</p>	<p>Weather forecast for next five days of Imphal West (11th to 15th July, 2018) Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. 32-34 °C & minimum temp. 22-25 °C. Relative humidity may reach upto 100 % (max RH) & 63 % (min RH). The average wind speed may be 2-3 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Maturity to harvesting stage (Pre-kharif rice)		- Rice can be harvested when 80% of panicles turn hard & golden yellow. Over maturity should be avoided to reduce shattering losses. - After harvesting prepare the plot for double cropping; same variety or late variety may be grown. - Recommended rice varieties are RC Maniphou-13, RC Maniphou-7, RC Maniphou 10.
	Nursery and transplanting to tillering (Kharif rice)		- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days. - Seedling can be transplanted within 3 rd week of July (for late transplanting). - Weed control: Apply Butachlor @25kg/ha within one week of transplanting. - If the crop is in tillering stage, weeding may be done manually or by using conoweeder followed by top dressing with Urea@33kg/ ha
Kharif Maize	Vegetative		- For the crops in vegetative phase, weeding may be done before rain by hand or apply Simazine @ 0.75 kg a.i. / ha. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Vegetative to flowering		- Hand weeding should be done before 30-35 days after sowing soybean and groundnut. Also, earthing-up and thinning may be done after rains. - Monitor for insect pest infestation.
Blackgram/ Rice Bean	Vegetative		- Weeding may be done after rain if the weed population is high. - Monitor for insect pest infestation.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Citrus			Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 350 g Urea, 600 g SSP and 300 g MOP per tree in circular trench about 30cm from trunk.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraxnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/ lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb @ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Cauliflower	Nursery		- Sow cauliflower seeds (early variety). Apply 1-2 kg FYM/ m ² of nursery bed.



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Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



(Early)			Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy straw.
Turmeric	Vegetative	Leaf Spot and leaf blotch	- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures against Leaf Spot and leaf blotch.
Colocassia	Vegetative	Leaf blight	- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.

Animal Sciences

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Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Fungal Toxin	• Avoid consumption of feed with fungal growth.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Protect from thunder showers especially during night.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.

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MANIPUR BULLETIN

10th July, 2018

Senapati

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th July, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6rd to 9th July, 2018) Observed 15.0 mm rainfall with mainly cloudy to overcast sky during past four days. Maximum temperature recorded ranged from 29.7 to 32.7 °C and minimum of 22.1 to 23.3 °C with mean relative humidity 90.3 % max and 64.8 % min was recorded in the past four days with average wind speed was 2.8 – 5.9 km/ hr.</p>	<p>Weather forecast for next five days of Senapati (11th to 15th July, 2018) Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. 29-30 °C & minimum temp. 19-21 °C. Relative humidity may reach upto 95 % (max RH) & 73 % (min RH). The average wind speed may be 2 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Maturity to harvesting stage (Pre-kharif rice)		- Rice can be harvested when 80% of panicles turn hard & golden yellow. Over maturity should be avoided to reduce shattering losses. - After harvesting prepare the plot for double cropping; same variety or late variety may be grown. - Recommended rice varieties are RC Maniphou-13, RC Maniphou-7, RC Maniphou 10.
	Nursery and transplanting to tillering (Kharif rice)		- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days. - Seedling can be transplanted within 3 rd week of July (for late transplanting). - Weed control: Apply Butachlor @25kg/ha within one week of transplanting. - If the crop is in tillering stage, weeding may be done manually or by using conoweeder followed by top dressing with Urea@33kg/ ha
Kharif Maize	Vegetative		- For the crops in vegetative phase, weeding may be done before rain by hand or apply Simazine @ 0.75 kg a.i. / ha. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Vegetative to flowering		- Hand weeding should be done before 30-35 days after sowing soybean and groundnut. Also, earthing-up and thinning may be done after rains. - Monitor for insect pest infestation.
Blackgram/ Rice Bean	Vegetative		- Weeding may be done after rain if the weed population is high. - Monitor for insect pest infestation.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Citrus			Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 350 g Urea, 600 g SSP and 300 g MOP per tree in circular trench about 30cm from trunk.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraxnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/ lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb @ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
Cauliflower (Early)	Nursery		- Sow cauliflower seeds (early variety). Apply 1-2 kg FYM/ m ² of nursery bed. Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy



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“Gramin Krishi Mausam Seva”



			straw.
Turmeric	Vegetative	Leaf Spot and leaf blotch	- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures against Leaf Spot and leaf blotch.
Colocassia	Vegetative	Leaf blight	- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.

Animal Sciences

* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Fungal Toxin	• Avoid consumption of feed with fungal growth.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
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		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.

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MANIPUR BULLETIN

10th July, 2018

Tamenglong

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th July, 2018 as below:

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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
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	Nursery and transplanting to tillering (Kharif rice)		- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days. - Seedling can be transplanted within 3 rd week of July (for late transplanting). - Weed control: Apply Butachlor @25kg/ha within one week of transplanting. - If the crop is in tillering stage, weeding may be done manually or by using conoweeder followed by top dressing with Urea@33kg/ ha
Kharif Maize	Vegetative		- For the crops in vegetative phase, weeding may be done before rain by hand or apply Simazine @ 0.75 kg a.i. / ha. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Vegetative to flowering		- Hand weeding should be done before 30-35 days after sowing soybean and groundnut. Also, earthing-up and thinning may be done after rains. - Monitor for insect pest infestation.
Blackgram/ Rice Bean	Vegetative		- Weeding may be done after rain if the weed population is high. - Monitor for insect pest infestation.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
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		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Cauliflower	Nursery		- Sow cauliflower seeds (early variety). Apply 1-2 kg FYM/ m ² of nursery bed.



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“Gramin Krishi Mausam Seva”



(Early)			Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy straw.
Turmeric	Vegetative	Leaf Spot and leaf blotch	- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures against Leaf Spot and leaf blotch.
Colocassia	Vegetative	Leaf blight	- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.

Animal Sciences

* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Fungal Toxin	• Avoid consumption of feed with fungal growth.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Protect from thunder showers especially during night.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



MANIPUR BULLETIN

10th July, 2018

Thoubal

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th July, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6rd to 9th July, 2018) Observed 15.0 mm rainfall with mainly cloudy to overcast sky during past four days. Maximum temperature recorded ranged from 29.7 to 32.7 °C and minimum of 22.1 to 23.3 °C with mean relative humidity 90.3 % max and 64.8 % min was recorded in the past four days with average wind speed was 2.8 – 5.9 km/ hr.</p>	<p>Weather forecast for next five days of Thoubal (11th to 15th July, 2018) Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. 34-36 °C & minimum temp. 22-24 °C. Relative humidity may reach upto 99 % (max RH) & 78 % (min RH). The average wind speed may be 0-4 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Maturity to harvesting stage (Pre-kharif rice)		- Rice can be harvested when 80% of panicles turn hard & golden yellow. Over maturity should be avoided to reduce shattering losses. - After harvesting prepare the plot for double cropping; same variety or late variety may be grown. - Recommended rice varieties are RC Maniphou-13, RC Maniphou-7, RC Maniphou 10.
	Nursery and transplanting to tillering (Kharif rice)		- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days. - Seedling can be transplanted within 3 rd week of July (for late transplanting). - Weed control: Apply Butachlor @25kg/ha within one week of transplanting. - If the crop is in tillering stage, weeding may be done manually or by using conoweeder followed by top dressing with Urea@33kg/ ha
Kharif Maize	Vegetative		- For the crops in vegetative phase, weeding may be done before rain by hand or apply Simazine @ 0.75 kg a.i. / ha. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Vegetative to flowering		- Hand weeding should be done before 30-35 days after sowing soybean and groundnut. Also, earthing-up and thinning may be done after rains. - Monitor for insect pest infestation.
Blackgram/ Rice Bean	Vegetative		- Weeding may be done after rain if the weed population is high. - Monitor for insect pest infestation.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Citrus			Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 350 g Urea, 600 g SSP and 300 g MOP per tree in circular trench about 30cm from trunk.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraxnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/ lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb @ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Cauliflower	Nursery		- Sow cauliflower seeds (early variety). Apply 1-2 kg FYM/ m ² of nursery bed.



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“Gramin Krishi Mausam Seva”



(Early)			Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy straw.
Turmeric	Vegetative	Leaf Spot and leaf blotch	- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures against Leaf Spot and leaf blotch.
Colocassia	Vegetative	Leaf blight	- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.

Animal Sciences

* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Fungal Toxin	• Avoid consumption of feed with fungal growth.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Protect from thunder showers especially during night.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



MANIPUR BULLETIN

10th July, 2018

Ukhrul

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th July, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6rd to 9th July, 2018) Observed 15.0 mm rainfall with mainly cloudy to overcast sky during past four days. Maximum temperature recorded ranged from 29.7 to 32.7 °C and minimum of 22.1 to 23.3 °C with mean relative humidity 90.3 % max and 64.8 % min was recorded in the past four days with average wind speed was 2.8 – 5.9 km/ hr.</p>	<p>Weather forecast for next five days of Ukhrul (11th to 15th July, 2018) Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. 29-30 °C & minimum temp. 19-21 °C. Relative humidity may reach upto 100 % (max RH) & 88 % (min RH). The average wind speed may be 2 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Maturity to harvesting stage (Pre-kharif rice)		- Rice can be harvested when 80% of panicles turn hard & golden yellow. Over maturity should be avoided to reduce shattering losses. - After harvesting prepare the plot for double cropping; same variety or late variety may be grown. - Recommended rice varieties are RC Maniphou-13, RC Maniphou-7, RC Maniphou 10.
	Nursery and transplanting to tillering (Kharif rice)		- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days. - Seedling can be transplanted within 3 rd week of July (for late transplanting). - Weed control: Apply Butachlor @25kg/ha within one week of transplanting. - If the crop is in tillering stage, weeding may be done manually or by using conoweeder followed by top dressing with Urea@33kg/ ha
Kharif Maize	Vegetative		- For the crops in vegetative phase, weeding may be done before rain by hand or apply Simazine @ 0.75 kg a.i. / ha. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Vegetative to flowering		- Hand weeding should be done before 30-35 days after sowing soybean and groundnut. Also, earthing-up and thinning may be done after rains. - Monitor for insect pest infestation.
Blackgram/ Rice Bean	Vegetative		- Weeding may be done after rain if the weed population is high. - Monitor for insect pest infestation.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Citrus			Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 350 g Urea, 600 g SSP and 300 g MOP per tree in circular trench about 30cm from trunk.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraxnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/ lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb @ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
Cauliflower (Early)	Nursery		- Sow cauliflower seeds (early variety). Apply 1-2 kg FYM/ m ² of nursery bed. Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



			straw.
Turmeric	Vegetative	Leaf Spot and leaf blotch	- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures against Leaf Spot and leaf blotch.
Colocassia	Vegetative	Leaf blight	- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.

Animal Sciences

* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Fungal Toxin	• Avoid consumption of feed with fungal growth.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Protect from thunder showers especially during night.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.

(I. Meghachandra Singh)
Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



MANIPUR BULLETIN

10th July, 2018

Bishnupur

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th July, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6rd to 9th July, 2018) Observed 15.0 mm rainfall with mainly cloudy to overcast sky during past four days. Maximum temperature recorded ranged from 29.7 to 32.7 °C and minimum of 22.1 to 23.3 °C with mean relative humidity 90.3 % max and 64.8 % min was recorded in the past four days with average wind speed was 2.8 – 5.9 km/ hr.</p>	<p>Weather forecast for next five days of Bishnupur (11th to 15th July, 2018) Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. 33-35 °C & minimum temp. 23-24 °C. Relative humidity may reach upto 99 % (max RH) & 65 % (min RH). The average wind speed may be 0-2 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Maturity to harvesting stage (Pre-kharif rice)		- Rice can be harvested when 80% of panicles turn hard & golden yellow. Over maturity should be avoided to reduce shattering losses. - After harvesting prepare the plot for double cropping; same variety or late variety may be grown. - Recommended rice varieties are RC Maniphou-13, RC Maniphou-7, RC Maniphou 10.
	Nursery and transplanting to tillering (Kharif rice)		- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days. - Seedling can be transplanted within 3 rd week of July (for late transplanting). - Weed control: Apply Butachlor @25kg/ha within one week of transplanting. - If the crop is in tillering stage, weeding may be done manually or by using conoweeder followed by top dressing with Urea@33kg/ ha
Kharif Maize	Vegetative		- For the crops in vegetative phase, weeding may be done before rain by hand or apply Simazine @ 0.75 kg a.i. / ha. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Vegetative to flowering		- Hand weeding should be done before 30-35 days after sowing soybean and groundnut. Also, earthing-up and thinning may be done after rains. - Monitor for insect pest infestation.
Blackgram/ Rice Bean	Vegetative		- Weeding may be done after rain if the weed population is high. - Monitor for insect pest infestation.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Citrus			Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 350 g Urea, 600 g SSP and 300 g MOP per tree in circular trench about 30cm from trunk.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraxnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/ lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb @ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Cauliflower	Nursery		- Sow cauliflower seeds (early variety). Apply 1-2 kg FYM/ m ² of nursery bed.



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“Gramin Krishi Mausam Seva”



(Early)			Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy straw.
Turmeric	Vegetative	Leaf Spot and leaf blotch	- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures against Leaf Spot and leaf blotch.
Colocassia	Vegetative	Leaf blight	- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.

Animal Sciences

* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Fungal Toxin	• Avoid consumption of feed with fungal growth.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Protect from thunder showers especially during night.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004
“Gramin Krishi Mausam Seva”



MANIPUR BULLETIN

10th July, 2018

Chandel

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th July, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6rd to 9th July, 2018) Observed 15.0 mm rainfall with mainly cloudy to overcast sky during past four days. Maximum temperature recorded ranged from 29.7 to 32.7 °C and minimum of 22.1 to 23.3 °C with mean relative humidity 90.3 % max and 64.8 % min was recorded in the past four days with average wind speed was 2.8 – 5.9 km/ hr.</p>	<p>Weather forecast for next five days of Chandel (11th to 15th July, 2018) Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. 29-30 °C & minimum temp. 19-21 °C. Relative humidity may reach upto 99 % (max RH) & 82 % (min RH). The average wind speed may be 2-3 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Maturity to harvesting stage (Pre-kharif rice)		- Rice can be harvested when 80% of panicles turn hard & golden yellow. Over maturity should be avoided to reduce shattering losses. - After harvesting prepare the plot for double cropping; same variety or late variety may be grown. - Recommended rice varieties are RC Maniphou-13, RC Maniphou-7, RC Maniphou 10.
	Nursery and transplanting to tillering (Kharif rice)		- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days. - Seedling can be transplanted within 3 rd week of July (for late transplanting). - Weed control: Apply Butachlor @25kg/ha within one week of transplanting. - If the crop is in tillering stage, weeding may be done manually or by using conoweeder followed by top dressing with Urea@33kg/ ha
Kharif Maize	Vegetative		- For the crops in vegetative phase, weeding may be done before rain by hand or apply Simazine @ 0.75 kg a.i. / ha. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Vegetative to flowering		- Hand weeding should be done before 30-35 days after sowing soybean and groundnut. Also, earthing-up and thinning may be done after rains. - Monitor for insect pest infestation.
Blackgram/ Rice Bean	Vegetative		- Weeding may be done after rain if the weed population is high. - Monitor for insect pest infestation.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
Citrus			Spray Carbendazim @2g/lit water or Metalxyl + Mencozeb @ 2.5 g/lit water on sunny day. After 7 days spray Imidachloprid @ 5ml/ 10 lit of water. - Apply 350 g Urea, 600 g SSP and 300 g MOP per tree in circular trench about 30cm from trunk.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraxnose	Spray Carbendazim 12% + Mencozeb 63% WP @ 1 mg/ lit of water.
		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
		Brown spot	- Remove the infected leaves and burn and spray Zineb @ 2 mg/ lit of water.
		Termite	Apply Chloropyriphos 10%G @ 25kg/ha into the soil.
		Fruit fly	Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ ha.
		Thrips	Spray Imidachloprid 17.8% SL @ 1ml/ lit of water.
Pineapple	Fruiting		Spray Zineb @ 2g/lit of water.
Cauliflower	Nursery		- Sow cauliflower seeds (early variety). Apply 1-2 kg FYM/ m ² of nursery bed.



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(Early)			Drench the soil with Captan 50 W.P. Till germination the cover bed with paddy straw.
Turmeric	Vegetative	Leaf Spot and leaf blotch	- For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures against Leaf Spot and leaf blotch.
Colocassia	Vegetative	Leaf blight	- Prophylactic measures against leaf blight should be taken up. Spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.

Animal Sciences

* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Fungal Toxin	• Avoid consumption of feed with fungal growth.
		• Endoparasites	• De-worm using Levamisole Hydrochloride. Potash granules may be added in the drinking water of poultry.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
Sheep/ Goat	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo).
Pig	All age groups except the young ones	• De-worming	• De-worm with Albendazole @7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Protect from thunder showers especially during night.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Care & Management	• Mixture of mineral/ salts should be added in the feed/water to avoid loss of essential body salts. Avoid the cattle from chiting/ biting by flies. Adopt tick control measures.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	pond	Fish hormones like ovaprim, ovatide or Wova-FH can be injected in both the brooders @ 0.5 - 0.7 ml/kg of fish.
	Hatcheries	water	Hatching can be done in traditional happas having outer & inner happas or circular hatcheries. A mild current with fine shower is needed for circular hatcheries. Feed should not be given for 3 days.
	Nurseries	ponds	- Stock 20-30 lakhs spawns in one hectare water. Water depth should be more than 1.0 m. Feeding should be given@5-10% body weight/day.

(I. Meghachandra Singh)
 Scientist i/c, GKMS



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MANIPUR BULLETIN

10th July, 2018

Churachandpur

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 11th to 15th July, 2018 as below:

<p>Significant past weather for the preceding bi-weekly of Imphal - West (6rd to 9th July, 2018) Observed 15.0 mm rainfall with mainly cloudy to overcast sky during past four days. Maximum temperature recorded ranged from 29.7 to 32.7 °C and minimum of 22.1 to 23.3 °C with mean relative humidity 90.3 % max and 64.8 % min was recorded in the past four days with average wind speed was 2.8 – 5.9 km/ hr.</p>	<p>Weather forecast for next five days of Churachandpur (11th to 15th July, 2018) Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. 32-34 °C & minimum temp. 22-25 °C. Relative humidity may reach upto 100 % (max RH) & 78 % (min RH). The average wind speed may be 0-2 km/hr.</p>
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Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Maturity to harvesting stage (Pre-kharif rice)		- Rice can be harvested when 80% of panicles turn hard & golden yellow. Over maturity should be avoided to reduce shattering losses. - After harvesting prepare the plot for double cropping; same variety or late variety may be grown. - Recommended rice varieties are RC Maniphou-13, RC Maniphou-7, RC Maniphou 10.
	Nursery and transplanting to tillering (Kharif rice)		- 21-25 days old seedlings may be uprooted and transplanted in the main field within 2 days. - Seedling can be transplanted within 3 rd week of July (for late transplanting). - Weed control: Apply Butachlor @25kg/ha within one week of transplanting. - If the crop is in tillering stage, weeding may be done manually or by using conoweeder followed by top dressing with Urea@33kg/ ha
Kharif Maize	Vegetative		- For the crops in vegetative phase, weeding may be done before rain by hand or apply Simazine @ 0.75 kg a.i. / ha. - Maintain proper drainage system to avoid water logging.
Soybean/ Groundnut	Vegetative to flowering		- Hand weeding should be done before 30-35 days after sowing soybean and groundnut. Also, earthing-up and thinning may be done after rains. - Monitor for insect pest infestation.
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