



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

**MANIPUR BULLETIN****12<sup>th</sup> January, 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 13<sup>th</sup> to 17<sup>th</sup> January, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 11<sup>th</sup> January, 2018)**

Observed clear sky with **no** rainfall during past three days. Maximum temperature range of 21.0 to 21.7 °C and minimum temperature range of 3.7 to 4.0 ° C with mean relative humidity 90.33 % max and 40.67 % min was recorded in the past three days.

**Weather forecast for next five days of Bishnupur (13<sup>th</sup> to 17<sup>th</sup> January, 2018)**

Likely to have dense to very dense fog at isolated places during morning hours and clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 22-23 ° C & minimum temp. 6° C and relative humidity may reach up to 87% (max RH) & 49% (min RH). The average wind speed may be 0-2 km/hr.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rapeseed/ Mustard/</b>	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once.
		Downy mildew, Powdery mildew, white rust & Alternaria blight	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing. or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
<b>Lentil/ Blackgram (late variety)/ Field Pea</b>	Vegetative to flowering	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
<b>Rabi Maize</b>	Early vegetative		- Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize.
<b>Potato</b>	Vegetative		- If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-seed bins</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Cucurbits</b>	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10.
<b>Onion</b>	Vegetative		- Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting.
<b>Cole crops</b>	Nursery raising		- Nursery for late crops may be raised.
<b>Citrus</b>	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
	For grown up trees	Powdery mildew	If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water.
<b>Tomato</b>	Vegetative to flowering	Early blight	- Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.



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



	Sowing		<ul style="list-style-type: none"> <li>- Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field.</li> <li>- Nursery bed of 0.75m x 4m may be prepared and mix Carbazodiazim @ 5g/ 3m<sup>2</sup> area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>- Sow seeds @ 10g/ 3m<sup>2</sup> area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.</li> </ul>
--	--------	--	--

#### Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
<b>Sheep/ Goat</b>	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years.
		• De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
<b>Pig</b>	All age groups except the young ones	• Coccidial infection	• Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		• De-worming	• De-worm with Albendazole @ 7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals.
		• 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. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures
		Mastitis	• Adequate care must be ensured for prevention of mastitis for the milch animals.

• Fodder cultivation: Oat crop may be sown immediately.

#### Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
<b>Carp culture</b>	Grow-out	Pond water	- Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m. - Replace half of pond water with fresh & clean water at every 25-30 days interval. - Minimum feed must be provided, i.e., @ 1-2% of body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs. - harvesting of fish may be done in area where water availability is low.
		Feeding	- Feeds should be provided once a 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****12<sup>th</sup> January, 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 13<sup>th</sup> to 17<sup>th</sup> January, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 11<sup>th</sup> January, 2018)**

Observed clear sky with **no** rainfall during past three days. Maximum temperature range of 21.0 to 21.7 °C and minimum temperature range of 3.7 to 4.0 °C with mean relative humidity 90.33 % max and 40.67 % min was recorded in the past three days.

**Weather forecast for next five days of Chandel (13<sup>th</sup> to 17<sup>th</sup> January, 2018)**

Likely to have dense to very dense fog at isolated places during morning hours and clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 19-21 °C & minimum temp. 4-6° C and relative humidity may reach up to 85% (max RH) & 54% (min RH). The average wind speed may be 2-4 km/hr.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rapeseed/ Mustard/</b>	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once.
		Downy mildew, Powdery mildew, white rust & Alternaria blight	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing. or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
<b>Lentil/ Blackgram (late variety)/ Field Pea</b>	Vegetative to flowering	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
<b>Rabi Maize</b>	Early vegetative		- Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize.
<b>Potato</b>	Vegetative		- If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-seed bins</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Cucurbits</b>	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10.
<b>Onion</b>	Vegetative		- Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting.
<b>Cole crops</b>	Nursery raising		- Nursery for late crops may be raised.
<b>Citrus</b>	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
	For grown up trees	Powdery mildew	If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water.
<b>Tomato</b>	Vegetative to flowering	Early blight	- Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.



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



	Sowing		<ul style="list-style-type: none"> <li>- Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field.</li> <li>- Nursery bed of 0.75m x 4m may be prepared and mix Carbazothiazim @ 5g/ 3m<sup>2</sup> area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>- Sow seeds @ 10g/ 3m<sup>2</sup> area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.</li> </ul>
--	--------	--	---

### Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
<b>Sheep/ Goat</b>	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years.
		• De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
<b>Pig</b>	All age groups except the young ones	• Coccidial infection	• Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		• De-worming	• De-worm with Albendazole @ 7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals.
		• 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. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures
		Mastitis	• Adequate care must be ensured for prevention of mastitis for the milch animals.

- Fodder cultivation: Oat crop may be sown immediately.

### Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
<b>Carp culture</b>	Grow-out	Pond water	- Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m. - Replace half of pond water with fresh & clean water at every 25-30 days interval. - Minimum feed must be provided, i.e., @ 1-2% of body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs. - harvesting of fish may be done in area where water availability is low.
		Feeding	- Feeds should be provided once a 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****12<sup>th</sup> January, 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 13<sup>th</sup> to 17<sup>th</sup> January, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 11<sup>th</sup> January, 2018)**

Observed clear sky with **no** rainfall during past three days. Maximum temperature range of 21.0 to 21.7 °C and minimum temperature range of 3.7 to 4.0 °C with mean relative humidity 90.33 % max and 40.67 % min was recorded in the past three days.

**Weather forecast for next five days of Churachandpur (13<sup>th</sup> to 17<sup>th</sup> January, 2018)**

Likely to have dense to very dense fog at isolated places during morning hours and clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 22-23 °C & minimum temp. 4-6° C and relative humidity may reach up to 87% (max RH) & 49% (min RH). The average wind speed may be 0-2 km/hr.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rapeseed/ Mustard/</b>	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once.
		Downy mildew, Powdery mildew, white rust & Alternaria blight	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing. or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
<b>Lentil/ Blackgram (late variety)/ Field Pea</b>	Vegetative to flowering	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
<b>Rabi Maize</b>	Early vegetative		- Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize.
<b>Potato</b>	Vegetative	Aphid	- If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam. - If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-seed bins</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Cucurbits</b>	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10.
<b>Onion</b>	Vegetative		- Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting.
<b>Cole crops</b>	Nursery raising		- Nursery for late crops may be raised.
<b>Citrus</b>	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
	For grown up trees	Powdery mildew	If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water.
<b>Tomato</b>	Vegetative to flowering	Early blight	- Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.





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



	Sowing		<ul style="list-style-type: none"> <li>- Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field.</li> <li>- Nursery bed of 0.75m x 4m may be prepared and mix Carabendazim @ 5g/ 3m<sup>2</sup> area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>- Sow seeds @ 10g/ 3m<sup>2</sup> area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.</li> </ul>
--	--------	--	---

### Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
<b>Sheep/ Goat</b>	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years.
		• De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
<b>Pig</b>	All age groups except the young ones	• Coccidial infection	• Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		• De-worming	• De-worm with Albendazole @ 7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals.
		• 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. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures
		Mastitis	• Adequate care must be ensured for prevention of mastitis for the milch animals.

- Fodder cultivation: Oat crop may be sown immediately.

### Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
<b>Carp culture</b>	Grow-out	Pond water	<ul style="list-style-type: none"> <li>- Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m.</li> <li>- Replace half of pond water with fresh &amp; clean water at every 25-30 days interval.</li> <li>- Minimum feed must be provided, i.e., @ 1-2% of body weight per day.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>- Male and female brooders should be stock in separate ponds for early breeding programs.</li> <li>- harvesting of fish may be done in area where water availability is low.</li> </ul>
		Feeding	<ul style="list-style-type: none"> <li>- Feeds should be provided once a day.</li> </ul>

(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****12<sup>th</sup> January, 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 13<sup>th</sup> to 17<sup>th</sup> January, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 11<sup>th</sup> January, 2018)**

Observed clear sky with **no** rainfall during past three days. Maximum temperature range of 21.0 to 21.7 °C and minimum temperature range of 3.7 to 4.0 °C with mean relative humidity 90.33 % max and 40.67 % min was recorded in the past three days.

**Weather forecast for next five days of Imphal East (13<sup>th</sup> to 17<sup>th</sup> January, 2018)**

Likely to have dense to very dense fog at isolated places during morning hours and clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 20-21 °C & minimum temp. 4-5 °C and relative humidity may reach up to 88% (max RH) & 46% (min RH). The average wind speed may be 2-4 km/hr.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rapeseed/ Mustard/</b>	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once.
		Downy mildew, Powdery mildew, white rust & Alternaria blight	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing. or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
<b>Lentil/ Blackgram (late variety)/ Field Pea</b>	Vegetative to flowering	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
<b>Rabi Maize</b>	Early vegetative		- Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize.
<b>Potato</b>	Vegetative		- If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-seed bins</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Cucurbits</b>	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10.
<b>Onion</b>	Vegetative		- Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting.
<b>Cole crops</b>	Nursery raising		- Nursery for late crops may be raised.
<b>Citrus</b>	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
	For grown up trees	Powdery mildew	If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water.
<b>Tomato</b>	Vegetative to flowering	Early blight	- Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.



# ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

## “Gramin Krishi Mausam Seva”



	Sowing		<ul style="list-style-type: none"> <li>- Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field.</li> <li>- Nursery bed of 0.75m x 4m may be prepared and mix Carbenadazim @ 5g/ 3m<sup>2</sup> area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>- Sow seeds @ 10g/ 3m<sup>2</sup> area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.</li> </ul>
--	--------	--	---

### Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
<b>Sheep/ Goat</b>	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years.
		• De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
<b>Pig</b>	All age groups except the young ones	• Coccidial infection	• Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		• De-worming	• De-worm with Albendazole @ 7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals.
		• 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. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures
		Mastitis	• Adequate care must be ensured for prevention of mastitis for the milch animals.

- Fodder cultivation: Oat crop may be sown immediately.

### Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
<b>Carp culture</b>	Grow-out	Pond water	- Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m. - Replace half of pond water with fresh & clean water at every 25-30 days interval. - Minimum feed must be provided, i.e., @ 1-2% of body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs. - harvesting of fish may be done in area where water availability is low.
		Feeding	- Feeds should be provided once a 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****12<sup>th</sup> January, 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 13<sup>th</sup> to 17<sup>th</sup> January, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 11<sup>th</sup> January, 2018)**

Observed clear sky with **no** rainfall during past three days. Maximum temperature range of 21.0 to 21.7 °C and minimum temperature range of 3.7 to 4.0 °C with mean relative humidity 90.33 % max and 40.67 % min was recorded in the past three days.

**Weather forecast for next five days of Imphal West (13<sup>th</sup> to 17<sup>th</sup> January, 2018)**

Likely to have dense to very dense fog at isolated places during morning hours and clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 20-21 °C & minimum temp. 4-5 °C and relative humidity may reach up to 88% (max RH) & 46% (min RH). The average wind speed may be 2-4 km/hr.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rapeseed/ Mustard/</b>	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once.
		Downy mildew, Powdery mildew, white rust & Alternaria blight	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing. or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
<b>Lentil/ Blackgram (late variety)/ Field Pea</b>	Vegetative to flowering	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
<b>Rabi Maize</b>	Early vegetative		- Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize.
<b>Potato</b>	Vegetative		- If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-seed bins</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Cucurbits</b>	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10.
<b>Onion</b>	Vegetative		- Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting.
<b>Cole crops</b>	Nursery raising		- Nursery for late crops may be raised.
<b>Citrus</b>	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
	For grown up trees	Powdery mildew	If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water.
<b>Tomato</b>	Vegetative to flowering	Early blight	- Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.



# ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

## “Gramin Krishi Mausam Seva”



	Sowing		<ul style="list-style-type: none"> <li>- Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field.</li> <li>- Nursery bed of 0.75m x 4m may be prepared and mix Carbazodim @ 5g/ 3m<sup>2</sup> area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>- Sow seeds @ 10g/ 3m<sup>2</sup> area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.</li> </ul>
--	--------	--	---

### Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb.
		• Coccidiosis	• Litter must be stirred frequently and aired every day.
		• Parasitic	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
Sheep/ Goat	All age groups	• Vaccination	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
		• De-worming	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month.
		• Management	• Take adequate care to prevent occurrence of Mastitis.
Pig	All age groups except the young ones	• Vaccination	• PPR immunization must be done once in every three years.
		• Skin disease	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
		• De-worming	• Avoid dampness to protect from Pneumonia.
		• Coccidial infection	• Increase energy feed by 5%.
Cattle	All age groups excepts the young ones	• Vaccination	• Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		• Deworming	• De-worm with Albendazole @ 7.5 mg/kg b.wt.
		• Care & Management	• Vaccinate against FMD and Swine Fever.
		Mastitis	• Sprayer of Anti- <i>Psoroptic</i> may be used

- Fodder cultivation: Oat crop may be sown immediately.

### Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	<ul style="list-style-type: none"> <li>- Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m.</li> <li>- Replace half of pond water with fresh &amp; clean water at every 25-30 days interval.</li> <li>- Minimum feed must be provided, i.e., @ 1-2% of body weight per day.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>- Male and female brooders should be stock in separate ponds for early breeding programs.</li> <li>- harvesting of fish may be done in area where water availability is low.</li> </ul>
		Feeding	<ul style="list-style-type: none"> <li>- Feeds should be provided once a day.</li> </ul>

(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****12<sup>th</sup> January, 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 13<sup>th</sup> to 17<sup>th</sup> January, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 11<sup>th</sup> January, 2018)**

Observed clear sky with **no** rainfall during past three days. Maximum temperature range of 21.0 to 21.7 °C and minimum temperature range of 3.7 to 4.0 °C with mean relative humidity 90.33 % max and 40.67 % min was recorded in the past three days.

**Weather forecast for next five days of Senapati (13<sup>th</sup> to 17<sup>th</sup> January, 2018)**

Likely to have dense to very dense fog at isolated places during morning hours and clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 16-17 °C & minimum temp. 3-4° C and relative humidity may reach up to 89% (max RH) & 46% (min RH). The average wind speed may be 2-4 km/hr.

**Field Crops**

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Rapeseed/ Mustard/</b>	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once.
		Downy mildew, Powdery mildew, white rust & Alternaria blight	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing. or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
<b>Lentil/ Blackgram (late variety)/ Field Pea</b>	Vegetative to flowering	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
<b>Rabi Maize</b>	Early vegetative		- Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-seed bins</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.

**Horticulture Crops**

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Cole crops</b>	Nursery raising		- Nursery for late crops may be raised.
<b>Citrus</b>	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
	For grown up trees	Powdery mildew	If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water.

**Animal Sciences**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
<b>Sheep/ Goat</b>	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years.
		• De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.

**ICAR Research Complex for N.E.H. Region**

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

		<ul style="list-style-type: none"><li>• Management</li></ul>	<ul style="list-style-type: none"><li>• Avoid dampness to protect from Pneumonia.</li><li>• Increase energy feed by 5%.</li></ul>
<b>Pig</b>	All age groups except the young ones	<ul style="list-style-type: none"><li>• Coccidial infection</li></ul>	<ul style="list-style-type: none"><li>• Ofloxacin/ Ornidazole (O<sub>2</sub>) tab twice daily for 5 days.</li></ul>
		<ul style="list-style-type: none"><li>• De-worming</li></ul>	<ul style="list-style-type: none"><li>• De-worm with Albendazole @7.5 mg/kg b.wt.</li></ul>
		<ul style="list-style-type: none"><li>• Vaccination</li></ul>	<ul style="list-style-type: none"><li>• Vaccinate against FMD and Swine Fever.</li></ul>
		<ul style="list-style-type: none"><li>• Skin disease</li></ul>	<ul style="list-style-type: none"><li>• Sprayer of Anti-<i>Psoroptic</i> may be used</li></ul>
<b>Cattle</b>	All age groups excepts the young ones	<ul style="list-style-type: none"><li>• Vaccination</li></ul>	<ul style="list-style-type: none"><li>• Vaccinate against B.Q., F.M.D. &amp; H.S. if not yet vaccinated.</li><li>• Cases of H.S. may be encountered during this period</li><li>• Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals.</li></ul>
		<ul style="list-style-type: none"><li>• Deworming</li></ul>	<ul style="list-style-type: none"><li>• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.</li></ul>
		<ul style="list-style-type: none"><li>• Care &amp; Management</li></ul>	<ul style="list-style-type: none"><li>• Mixture of mineral/ salts should be added in the feed.</li><li>• Avoid the cattle from chiting/biting by Flies</li><li>• Adopt tick control measures</li></ul>
		Mastitis	<ul style="list-style-type: none"><li>• Adequate care must be ensured for prevention of mastitis for the milch animals.</li></ul>
<ul style="list-style-type: none"><li>• Fodder cultivation: Oat crop may be sown immediately.</li></ul>			

(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****12<sup>th</sup> January, 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 13<sup>th</sup> to 17<sup>th</sup> January, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 11<sup>th</sup> January, 2018)**

Observed clear sky with **no** rainfall during past three days. Maximum temperature range of 21.0 to 21.7 °C and minimum temperature range of 3.7 to 4.0 °C with mean relative humidity 90.33 % max and 40.67 % min was recorded in the past three days.

**Weather forecast for next five days of Tamenglong (13<sup>th</sup> to 17<sup>th</sup> January, 2018)**

Likely to have dense to very dense fog at isolated places during morning hours and clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 16-17 °C & minimum temp. 3-4 °C and relative humidity may reach up to 89% (max RH) & 46% (min RH). The average wind speed may be 2-4 km/hr.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rapeseed/ Mustard/</b>	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once.
		Downy mildew, Powdery mildew, white rust & Alternaria blight	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing. or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
<b>Lentil/ Blackgram (late variety)/ Field Pea</b>	Vegetative to flowering	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
<b>Rabi Maize</b>	Early vegetative		- Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize.
<b>Potato</b>	Vegetative		- If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-seed bins</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Cucurbits</b>	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10.
<b>Onion</b>	Vegetative		- Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting.
<b>Cole crops</b>	Nursery raising		- Nursery for late crops may be raised.
<b>Citrus</b>	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
	For grown up trees	Powdery mildew	If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water.
<b>Tomato</b>	Vegetative to flowering	Early blight	- Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.





# ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

## “Gramin Krishi Mausam Seva”



	Sowing		<ul style="list-style-type: none"> <li>- Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field.</li> <li>- Nursery bed of 0.75m x 4m may be prepared and mix Carbazodim @ 5g/ 3m<sup>2</sup> area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>- Sow seeds @ 10g/ 3m<sup>2</sup> area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.</li> </ul>
--	--------	--	---

### Animal Sciences

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
<b>Sheep/ Goat</b>	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years.
		• De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
<b>Pig</b>	All age groups except the young ones	• Coccidial infection	• Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		• De-worming	• De-worm with Albendazole @ 7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals.
		• 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. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures
		Mastitis	• Adequate care must be ensured for prevention of mastitis for the milch animals.

- Fodder cultivation: Oat crop may be sown immediately.

### Fishery:

Type of Farming	Stage	Management	Agro-metrological advisories
<b>Carp culture</b>	Grow-out	Pond water	- Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m. - Replace half of pond water with fresh & clean water at every 25-30 days interval. - Minimum feed must be provided, i.e., @ 1-2% of body weight per day.
		Fish	- Male and female brooders should be stock in separate ponds for early breeding programs. - harvesting of fish may be done in area where water availability is low.
		Feeding	- Feeds should be provided once a 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****12<sup>th</sup> January, 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 13<sup>th</sup> to 17<sup>th</sup> January, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 11<sup>th</sup> January, 2018)**

Observed clear sky with **no** rainfall during past three days. Maximum temperature range of 21.0 to 21.7 °C and minimum temperature range of 3.7 to 4.0 °C with mean relative humidity 90.33 % max and 40.67 % min was recorded in the past three days.

**Weather forecast for next five days of Thoubal (13<sup>th</sup> to 17<sup>th</sup> January, 2018)**

Likely to have dense to very dense fog at isolated places during morning hours and clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 22-23 °C & minimum temp. 6° C and relative humidity may reach up to 87% (max RH) & 49% (min RH). The average wind speed may be 0-2 km/hr.

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rapeseed/ Mustard/</b>	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once.
		Downy mildew, Powdery mildew, white rust & Alternaria blight	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing. or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
<b>Lentil/ Blackgram (late variety)/ Field Pea</b>	Vegetative to flowering	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
<b>Rabi Maize</b>	Early vegetative		- Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize.
<b>Potato</b>	Vegetative		- If it is 40-45 days old, light hoeing/ earthing up may be done followed by top dressing with 30-35 Kg DAP/ sangam.
		Aphid	- If aphid is observed in small area, wash off it with plain water but if it is severe, spray Cypermethrin 20 E.C. @ 1ml/ litre of water or Nuvan @ 0.5ml/litre of water.
		Cut worm	If cut-worm is observed then prepare poison bait of Trichlorfon (mixture of 1kg husk + 40g sugar + 5g Trichlorfon + water) and apply manually by putting near the stem of plant above the soil surface.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-seed bins</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.
<b>Horticulture Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Cucurbits</b>	Nursery raising		- Raise cucurbits like water-melon, cucumber, sponge gourd, etc. in poly-pouch and trays under polyhouse. - Recommended varieties of water melon :- for small type: Water Baby; for big type: Madhavi-10.
<b>Onion</b>	Vegetative		- Apply 64kg Urea, 44kg DAP and 34 kg MOP per sangam as basal dose followed by 64kg urea/ sangam after 30-35 days after transplanting.
<b>Cole crops</b>	Nursery raising		- Nursery for late crops may be raised.
<b>Citrus</b>	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
	For grown up trees	Powdery mildew	If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water.
<b>Tomato</b>	Vegetative to flowering	Early blight	- Apply Dichlorovos @ 0.5ml/ litre of water or Imidachlorpid @ 2ml/ 5 litres of water. Also apply Dithane M 45 @ 2g/ litre of water.

**ICAR Research Complex for N.E.H. Region**

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

	Sowing		<ul style="list-style-type: none"> <li>- Tomato nurseries should be raised under low cost polyhouse as the temperature is very low in open field.</li> <li>- Nursery bed of 0.75m x 4m may be prepared and mix Carbazodim @ 5g/ 3m<sup>2</sup> area, keep the bed covered with gunny bag for at least 24 hrs.</li> <li>- Sow seeds @ 10g/ 3m<sup>2</sup> area keep the bed covered with gunny bag. Seeds will germinate in 4-5 days.</li> </ul>
--	--------	--	---

**Animal Sciences**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
<b>Sheep/ Goat</b>	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years.
		• De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.
		• Management	• Avoid dampness to protect from Pneumonia. • Increase energy feed by 5%.
<b>Pig</b>	All age groups except the young ones	• Coccidial infection	• Ofloxacin/ Ornidazole (O <sub>2</sub> ) tab twice daily for 5 days.
		• De-worming	• De-worm with Albendazole @ 7.5 mg/kg b.wt.
		• Vaccination	• Vaccinate against FMD and Swine Fever.
		• Skin disease	• Sprayer of Anti- <i>Psoroptic</i> may be used
<b>Cattle</b>	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated. • Cases of H.S. may be encountered during this period • Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals.
		• 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. • Avoid the cattle from chiting/biting by Flies • Adopt tick control measures
		Mastitis	• Adequate care must be ensured for prevention of mastitis for the milch animals.

- Fodder cultivation: Oat crop may be sown immediately.

**Fishery:**

Type of Farming	Stage	Management	Agro-metrological advisories
<b>Carp culture</b>	Grow-out	Pond water	<ul style="list-style-type: none"> <li>- Lime/ Aqua magic should be applied regularly @ 20-30 kg/ha to keep good quality pond water. Water depth should be maintained at 1.0-1.5m.</li> <li>- Replace half of pond water with fresh &amp; clean water at every 25-30 days interval.</li> <li>- Minimum feed must be provided, i.e., @ 1-2% of body weight per day.</li> </ul>
		Fish	<ul style="list-style-type: none"> <li>- Male and female brooders should be stock in separate ponds for early breeding programs.</li> <li>- harvesting of fish may be done in area where water availability is low.</li> </ul>
		Feeding	- Feeds should be provided once a 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****12<sup>th</sup> January, 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 13<sup>th</sup> to 17<sup>th</sup> January, 2018 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (9<sup>th</sup> to 11<sup>th</sup> January, 2018)**

Observed clear sky with **no** rainfall during past three days. Maximum temperature range of 21.0 to 21.7 °C and minimum temperature range of 3.7 to 4.0 °C with mean relative humidity 90.33 % max and 40.67 % min was recorded in the past three days.

**Weather forecast for next five days of Ukhrul (13<sup>th</sup> to 17<sup>th</sup> January, 2018)**

Likely to have dense to very dense fog at isolated places during morning hours and clear to partly cloudy sky during afternoon hours upto Wednesday. The maximum temp. 16-17 °C & minimum temp. 3-4° C and relative humidity may reach up to 89% (max RH) & 46% (min RH). The average wind speed may be 2-4 km/hr.

**Field Crops**

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Rapeseed/ Mustard/</b>	Flowering to fruiting	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used. If the infestation is severe, then spray a systemic insecticide i.e. dimethoate once.
		Downy mildew, Powdery mildew, white rust & Alternaria blight	- Spray Redomil MZ 72 WP @ 2g/ litre after 50-60 days of sowing. or spray Garlic Bulb Extract (ST) @ 1% or Trichoderma harzianum.
<b>Lentil/ Blackgram (late variety)/ Field Pea</b>	Vegetative to flowering	Aphid	- For organic control against aphid, sprays that consist of Azadirachtin, neem oil or Pyrethrin may be used.
		Powdery mildew & rust	Spray Neem Seed Kernel Extract at 5% concentration for powdery mildew and nimbicidin (0.3%) to control rust disease.
<b>Rabi Maize</b>	Early vegetative		- Light irrigation may be given to keep soil moist if the soil is dry. - Thinning may be done in vegetative stage for mustard or pea intercropped with maize.
<b>Seeds storage</b>	Post harvest management		For seed purpose store the seeds in <b>RC-seed bins</b> after proper drying and cleaning of seeds along with dry charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.

**Horticulture Crops**

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
<b>Cole crops</b>	Nursery raising		- Nursery for late crops may be raised.
<b>Citrus</b>	For nursery	Leaf Minor	- Spray Monocrotophos @ 0.25-0.5ml/ lit water depending on the age of nursery.
		Leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
	For grown up trees	Powdery mildew	If powdery mildew is seen in the orchard, harvest mature fruits and spray Bayleton @ 7 g / 15 lit of water.

**Animal Sciences**

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
<b>Poultry (Chicken/ Duck)</b>	All age groups	• Management	Protect animals/ birds from cold. Cover the wall with hessian cloth/ polythene sheet during night time. Provide Furavet Powder @ 1g/ 2 lit of drinking water and Vimeral @ 5 ml per lit of water. Provide external heat source such as “Meifu”/ chulhas or bulb. • Litter must be stirred frequently and aired every day.
		• Coccidiosis	• Give Amprolium @ 1 gm/ litre of drinking water for 5-7 days.
		• Parasitic	• Give Albendazole liquid @ 40 ml for 100 birds once only and half dose by next day is suggested.
<b>Sheep/ Goat</b>	All age groups	• Vaccination	• If the animals have not been vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. this must be done during this month. • Take adequate care to prevent occurrence of Mastitis. • PPR immunization must be done once in every three years.
		• De-worming	• Administer Tolzan-F @ 2.5ml orally/ 50kg b. wt.

**ICAR Research Complex for N.E.H. Region**

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

		<ul style="list-style-type: none"><li>• Management</li></ul>	<ul style="list-style-type: none"><li>• Avoid dampness to protect from Pneumonia.</li><li>• Increase energy feed by 5%.</li></ul>
<b>Pig</b>	All age groups except the young ones	<ul style="list-style-type: none"><li>• Coccidial infection</li></ul>	<ul style="list-style-type: none"><li>• Ofloxacin/ Ornidazole (O<sub>2</sub>) tab twice daily for 5 days.</li></ul>
		<ul style="list-style-type: none"><li>• De-worming</li></ul>	<ul style="list-style-type: none"><li>• De-worm with Albendazole @7.5 mg/kg b.wt.</li></ul>
		<ul style="list-style-type: none"><li>• Vaccination</li></ul>	<ul style="list-style-type: none"><li>• Vaccinate against FMD and Swine Fever.</li></ul>
		<ul style="list-style-type: none"><li>• Skin disease</li></ul>	<ul style="list-style-type: none"><li>• Sprayer of Anti-<i>Psoroptic</i> may be used</li></ul>
<b>Cattle</b>	All age groups excepts the young ones	<ul style="list-style-type: none"><li>• Vaccination</li></ul>	<ul style="list-style-type: none"><li>• Vaccinate against B.Q., F.M.D. &amp; H.S. if not yet vaccinated.</li><li>• Cases of H.S. may be encountered during this period</li><li>• Immediate treatment using appropriate drugs with the help of Consultant must be advocated to save the animals.</li></ul>
		<ul style="list-style-type: none"><li>• Deworming</li></ul>	<ul style="list-style-type: none"><li>• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.</li></ul>
		<ul style="list-style-type: none"><li>• Care &amp; Management</li></ul>	<ul style="list-style-type: none"><li>• Mixture of mineral/ salts should be added in the feed.</li><li>• Avoid the cattle from chiting/biting by Flies</li><li>• Adopt tick control measures</li></ul>
		Mastitis	<ul style="list-style-type: none"><li>• Adequate care must be ensured for prevention of mastitis for the milch animals.</li></ul>
<ul style="list-style-type: none"><li>• Fodder cultivation: Oat crop may be sown immediately.</li></ul>			

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