



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

**MANIPUR BULLETIN****21<sup>st</sup> July, 2017****Ukhrul**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 22<sup>nd</sup> to 26<sup>th</sup> July, 2017 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (18<sup>th</sup> to 20<sup>th</sup> July, 2017)**

Observed mainly cloudy to overcast sky and **17.3 mm** rainfall was recorded during past three days. Maximum temperature range of 26.0 to 28.2 °C and minimum temperature range of 21.7 to 23.2 °C with mean relative humidity 89.7 % max and 83.7 % min was recorded in the past three days.

**Weather forecast for next five days of Ukhrul (22<sup>nd</sup> to 26<sup>th</sup> July, 2017)**

Likely to have rains at isolated places with mainly cloudy to overcast sky and maximum temp. 32 - 33 °C & minimum temp. 24 °C. Relative humidity may reach up to 98 % (max RH) & 86 % (min RH). The average wind speed may be 2-3 km/hr.

**Seedling of rice may be raised using dry bed method with RC Maniphou-12 for transplanting before 15<sup>th</sup> August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot.**

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rice</b>	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> <li>- Gap filling of the rice seedlings should be done immediately in the fields that had been flooded.</li> <li>- 4 to 5 old seedlings (40-45days old) should be planted per hill.</li> <li>- For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised.</li> <li>- To have more tillers, avoid excess water in the field.</li> </ul>
			<ul style="list-style-type: none"> <li>- If transplanting was not done then complete transplanting before 31<sup>st</sup> July if seedlings is available.</li> <li>- During final leveling apply fertilizer @ 60-80 kg N, 40 kg P<sub>2</sub>O<sub>5</sub> and 30 kg K<sub>2</sub>O/ha with half of N, full of P<sub>2</sub>O<sub>5</sub> and 2/3 of K<sub>2</sub>O as basal dose before transplanting seedlings.</li> <li>- Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25 x 10cm using beaded rope.</li> <li>- Maintain a thin film of water upto 7 days after transplanting. Then increase water to 5-8cm.</li> <li>- Weed control: Apply Butachlor @ 25 kg/ha within one week of transplanting.</li> </ul>
		Upland area/ hill slopes	<ul style="list-style-type: none"> <li>- In upland area, hand weeding may be done. Off-type plants must be removed. Then top dressing of one-third of N and potash should be done at 25 days of transplanting after draining out complete water. After 48hrs of fertilization, the field should be re-irrigated maintaining depth of 5cm.</li> </ul>
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water after rain.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
	Direct seeding with drum seeder		<ul style="list-style-type: none"> <li>- The seeds may be sown when water level goes down.</li> <li>- Recommended rice var. RC Maniphou-7.</li> <li>- Treat seed with Humicil @ 5ml/kg seed.</li> <li>- Puddle the field and level properly.</li> <li>- Drain out water 24 hrs before sowing.</li> <li>- Use just pre-germinated seeds.</li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- At knee height stage, apply urea @ 43 kg Urea/ ha after rains.</li> <li>- Measures must be taken to avoid water logging in the crop field.</li> </ul>
<b>Soybean / Groundnut</b>	Vegetative		<ul style="list-style-type: none"> <li>- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
<b>Blackgram &amp; Rice bean</b>	Vegetative		<ul style="list-style-type: none"> <li>- Avoid sowing in water logged fields. Also, avoid hairy caterpillars.</li> </ul>
<b>Seeds storage</b>	Post harvest management		<ul style="list-style-type: none"> <li>- For seed purpose dry, clean and store the seeds in <b>RC-seed bins</b> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.</li> <li>- For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>

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Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger	Vegetative to rhizome formation		Water soaked lesions may develop at the base of the pseudo-stem. Later on rotting may spread to the rhizome. To prevent it spray Redomil MZ72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
		Leaf spot	Prophylactic spray of of Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval may be sprayed against Taphrina leaf spot disease in turmeric.
		Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Early Cauliflower	Nursery		- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m <sup>2</sup> of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
		Plutella Diamond Black Moth	- There may be incidence of Plutella Diamond Black Moth in nursery. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraco nose	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.
Orange/Lime/ Lemon	Vegetative		Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk. 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.
		Fungal diseases	Prune the disease infected twigs and burn them outside the farm area. Spray Copper oxychloride @ 3ml/lit to control fungal disease.
		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Animal Sciences			
* Provide clean drinking water for birds and animals.			
- Apply Himax ointment twice daily on animal body to prevent bite of fly and mosquitoes.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - Avoid fungal infested feed. - Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft <sup>2</sup> area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
Pig	All age groups except the young ones	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
		Vaccination	- Vaccinate against FMD.
		Management	- Provide adequate amount of wholesome water (drinking). - Essential body salts may be provided.
Cattle	All age groups excepts the young ones	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Slush & Flood Management	Provide clean and wholesome water. Adequate arrangements for the animals to be kept at the safety place be made. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
		Milk fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.			



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**MANIPUR BULLETIN****21<sup>st</sup> July, 2017*****Imphal East***

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Observed mainly cloudy to overcast sky and **17.3 mm** rainfall was recorded during past three days. Maximum temperature range of 26.0 to 28.2 °C and minimum temperature range of 21.7 to 23.2 °C with mean relative humidity 89.7 % max and 83.7 % min was recorded in the past three days.

**Weather forecast for next five days of Imphal East (22<sup>nd</sup> to 26<sup>th</sup> July, 2017)**

Likely to have rains at isolated places with mainly cloudy to overcast sky and maximum temp. 29 - 31 °C & minimum temp. 22 - 23 °C. Relative humidity may reach up to 98 % (max RH) & 88 % (min RH). The average wind speed may be 2 – 4 km/hr.

***Seedling of rice may be raised using dry bed method with RC Maniphou-12 for transplanting before 15<sup>th</sup> August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot.***

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rice</b>	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> <li>- Gap filling of the rice seedlings should be done immediately in the fields that had been flooded.</li> <li>- 4 to 5 old seedlings (40-45days old) should be planted per hill.</li> <li>- For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised.</li> <li>- To have more tillers, avoid excess water in the field.</li> </ul>
			<ul style="list-style-type: none"> <li>- If transplanting was not done then complete transplanting before 31<sup>st</sup> July if seedlings is available.</li> <li>- During final leveling apply fertilizer @ 60-80 kg N, 40 kg P<sub>2</sub>O<sub>5</sub> and 30 kg K<sub>2</sub>O/ha with half of N, full of P<sub>2</sub>O<sub>5</sub> and 2/3 of K<sub>2</sub>O as basal dose before transplanting seedlings.</li> <li>- Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25 x 10cm using beaded rope.</li> <li>- Maintain a thin film of water upto 7 days after transplanting. Then increase water to 5-8cm.</li> <li>- Weed control: Apply Butachlor @ 25 kg/ha within one week of transplanting.</li> </ul>
		Upland area/ hill slopes	<ul style="list-style-type: none"> <li>- In upland area, hand weeding may be done. Off-type plants must be removed. Then top dressing of one-third of N and potash should be done at 25 days of transplanting after draining out complete water. After 48hrs of fertilization, the field should be re-irrigated maintaining depth of 5cm.</li> </ul>
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water after rain.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
	Direct seeding with drum seeder		<ul style="list-style-type: none"> <li>- The seeds may be sown when water level goes down.</li> <li>- Recommended rice var. RC Maniphou-7.</li> <li>- Treat seed with Hemicil @ 5ml/kg seed.</li> <li>- Puddle the field and level properly.</li> <li>- Drain out water 24 hrs before sowing.</li> <li>- Use just pre-germinated seeds.</li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- At knee height stage, apply urea @ 43 kg Urea/ ha after rains.</li> <li>- Measures must be taken to avoid water logging in the crop field.</li> </ul>
<b>Soybean / Groundnut</b>	Vegetative		<ul style="list-style-type: none"> <li>- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
<b>Blackgram &amp; Rice bean</b>	Vegetative		<ul style="list-style-type: none"> <li>- Avoid sowing in water logged fields. Also, avoid hairy caterpillars.</li> </ul>
<b>Seeds storage</b>	Post harvest management		<ul style="list-style-type: none"> <li>- For seed purpose dry, clean and store the seeds in <b>RC-seed bins</b> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.</li> <li>- For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>

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Early Cauliflower	Nursery		- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m <sup>2</sup> of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
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		Collar rot	Drench the soil of collar region with 1% Bordeaux mixture.
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		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.
Orange/Lime/ Lemon	Vegetative		Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk. 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.
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		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Animal Sciences			
* Provide clean drinking water for birds and animals.			
- Apply Himax ointment twice daily on animal body to prevent bite of fly and mosquitoes.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - Avoid fungal infested feed. - Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft <sup>2</sup> area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
Pig	All age groups except the young ones	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
		Vaccination	- Vaccinate against FMD.
		Management	- Provide adequate amount of wholesome water (drinking). - Essential body salts may be provided.
Cattle	All age groups excepts the young ones	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Slush & Flood Management	Provide clean and wholesome water. Adequate arrangements for the animals to be kept at the safety place be made. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
		Milk fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.			





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





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**Manipur Centre, Lamphelpat, Imphal - 795 004**  
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**MANIPUR BULLETIN****21<sup>st</sup> July, 2017*****Bishnupur***

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 22<sup>nd</sup> to 26<sup>th</sup> July, 2017 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (18<sup>th</sup> to 20<sup>th</sup> July, 2017)**

Observed mainly cloudy to overcast sky and **17.3 mm** rainfall was recorded during past three days. Maximum temperature range of 26.0 to 28.2 °C and minimum temperature range of 21.7 to 23.2 °C with mean relative humidity 89.7 % max and 83.7 % min was recorded in the past three days.

**Weather forecast for next five days of Bishnupur (22<sup>nd</sup> to 26<sup>th</sup> July, 2017)**

Likely to have rains at isolated places with mainly cloudy to overcast sky and maximum temp. 31 - 34 °C & minimum temp. 24 - 25 °C. Relative humidity may reach up to 98 % (max RH) & 93 % (min RH). The average wind speed may be 2 km/hr.

***Seedling of rice may be raised using dry bed method with RC Maniphou-12 for transplanting before 15<sup>th</sup> August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot.***

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rice</b>	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> <li>- Gap filling of the rice seedlings should be done immediately in the fields that had been flooded.</li> <li>- 4 to 5 old seedlings (40-45days old) should be planted per hill.</li> <li>- For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised.</li> <li>- To have more tillers, avoid excess water in the field.</li> </ul>
			<ul style="list-style-type: none"> <li>- If transplanting was not done then complete transplanting before 31<sup>st</sup> July if seedlings is available.</li> <li>- During final leveling apply fertilizer @ 60-80 kg N, 40 kg P<sub>2</sub>O<sub>5</sub> and 30 kg K<sub>2</sub>O/ha with half of N, full of P<sub>2</sub>O<sub>5</sub> and 2/3 of K<sub>2</sub>O as basal dose before transplanting seedlings.</li> <li>- Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25 x 10cm using beaded rope.</li> <li>- Maintain a thin film of water upto 7 days after transplanting. Then increase water to 5-8cm.</li> <li>- Weed control: Apply Butachlor @ 25 kg/ha within one week of transplanting.</li> </ul>
		Upland area/ hill slopes	<ul style="list-style-type: none"> <li>- In upland area, hand weeding may be done. Off-type plants must be removed. Then top dressing of one-third of N and potash should be done at 25 days of transplanting after draining out complete water. After 48hrs of fertilization, the field should be re-irrigated maintaining depth of 5cm.</li> </ul>
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water after rain.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
	Direct seeding with drum seeder		<ul style="list-style-type: none"> <li>- The seeds may be sown when water level goes down.</li> <li>- Recommended rice var. RC Maniphou-7.</li> <li>- Treat seed with Humicil @ 5ml/kg seed.</li> <li>- Puddle the field and level properly.</li> <li>- Drain out water 24 hrs before sowing.</li> <li>- Use just pre-germinated seeds.</li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- At knee height stage, apply urea @ 43 kg Urea/ ha after rains.</li> <li>- Measures must be taken to avoid water logging in the crop field.</li> </ul>
<b>Soybean / Groundnut</b>	Vegetative		<ul style="list-style-type: none"> <li>- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
<b>Blackgram &amp; Rice bean</b>	Vegetative		<ul style="list-style-type: none"> <li>- Avoid sowing in water logged fields. Also, avoid hairy caterpillars.</li> </ul>
<b>Seeds storage</b>	Post harvest management		<ul style="list-style-type: none"> <li>- For seed purpose dry, clean and store the seeds in <b>RC-seed bins</b> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.</li> <li>- For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>

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

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger	Vegetative to rhizome formation		Water soaked lesions may develop at the base of the pseudo-stem. Later on rotting may spread to the rhizome. To prevent it spray Redomil MZ72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
		Leaf spot	Prophylactic spray of of Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval may be sprayed against Taphrina leaf spot disease in turmeric.
		Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Early Cauliflower	Nursery		- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m <sup>2</sup> of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
		Plutella Diamond Black Moth	- There may be incidence of Plutella Diamond Black Moth in nursery. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraco nose	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.
Orange/Lime/ Lemon	Vegetative		Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk. 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.
		Fungal diseases	Prune the disease infected twigs and burn them outside the farm area. Spray Copper oxychloride @ 3ml/lit to control fungal disease.
		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Animal Sciences			
* Provide clean drinking water for birds and animals.			
- Apply Himax ointment twice daily on animal body to prevent bite of fly and mosquitoes.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - Avoid fungal infested feed. - Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft <sup>2</sup> area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
Pig	All age groups except the young ones	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
		Vaccination	- Vaccinate against FMD.
		Management	- Provide adequate amount of wholesome water (drinking). - Essential body salts may be provided.
Cattle	All age groups excepts the young ones	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Slush & Flood Management	Provide clean and wholesome water. Adequate arrangements for the animals to be kept at the safety place be made. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
		Milk fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.			



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**MANIPUR BULLETIN****21<sup>st</sup> July, 2017****Chandel**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 22<sup>nd</sup> to 26<sup>th</sup> July, 2017 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (18<sup>th</sup> to 20<sup>th</sup> July, 2017)**

Observed mainly cloudy to overcast sky and **17.3 mm** rainfall was recorded during past three days. Maximum temperature range of 26.0 to 28.2 °C and minimum temperature range of 21.7 to 23.2 °C with mean relative humidity 89.7 % max and 83.7 % min was recorded in the past three days.

**Weather forecast for next five days of Chandel (22<sup>nd</sup> to 26<sup>th</sup> July, 2017)**

Likely to have rains at isolated places with mainly cloudy to overcast sky and maximum temp. 30 - 32 °C & minimum temp. 24 - 25 °C. Relative humidity may reach up to 99 % (max RH) & 93 % (min RH). The average wind speed may be 2 - 4 km/hr.

**Seedling of rice may be raised using dry bed method with RC Maniphou-12 for transplanting before 15<sup>th</sup> August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot.**

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rice</b>	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> <li>- Gap filling of the rice seedlings should be done immediately in the fields that had been flooded.</li> <li>- 4 to 5 old seedlings (40-45days old) should be planted per hill.</li> <li>- For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised.</li> <li>- To have more tillers, avoid excess water in the field.</li> </ul>
			<ul style="list-style-type: none"> <li>- If transplanting was not done then complete transplanting before 31<sup>st</sup> July if seedlings is available.</li> <li>- During final leveling apply fertilizer @ 60-80 kg N, 40 kg P<sub>2</sub>O<sub>5</sub> and 30 kg K<sub>2</sub>O/ha with half of N, full of P<sub>2</sub>O<sub>5</sub> and 2/3 of K<sub>2</sub>O as basal dose before transplanting seedlings.</li> <li>- Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25 x 10cm using beaded rope.</li> <li>- Maintain a thin film of water upto 7 days after transplanting. Then increase water to 5-8cm.</li> <li>- Weed control: Apply Butachlor @ 25 kg/ha within one week of transplanting.</li> </ul>
		Upland area/ hill slopes	<ul style="list-style-type: none"> <li>- In upland area, hand weeding may be done. Off-type plants must be removed. Then top dressing of one-third of N and potash should be done at 25 days of transplanting after draining out complete water. After 48hrs of fertilization, the field should be re-irrigated maintaining depth of 5cm.</li> </ul>
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water after rain.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
	Direct seeding with drum seeder		<ul style="list-style-type: none"> <li>- The seeds may be sown when water level goes down.</li> <li>- Recommended rice var. RC Maniphou-7.</li> <li>- Treat seed with Humicil @ 5ml/kg seed.</li> <li>- Puddle the field and level properly.</li> <li>- Drain out water 24 hrs before sowing.</li> <li>- Use just pre-germinated seeds.</li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- At knee height stage, apply urea @ 43 kg Urea/ ha after rains.</li> <li>- Measures must be taken to avoid water logging in the crop field.</li> </ul>
<b>Soybean / Groundnut</b>	Vegetative		<ul style="list-style-type: none"> <li>- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
<b>Blackgram &amp; Rice bean</b>	Vegetative		<ul style="list-style-type: none"> <li>- Avoid sowing in water logged fields. Also, avoid hairy caterpillars.</li> </ul>
<b>Seeds storage</b>	Post harvest management		<ul style="list-style-type: none"> <li>- For seed purpose dry, clean and store the seeds in <b>RC-seed bins</b> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.</li> <li>- For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>

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Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger	Vegetative to rhizome formation		Water soaked lesions may develop at the base of the pseudo-stem. Later on rotting may spread to the rhizome. To prevent it spray Redomil MZ72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
		Leaf spot	Prophylactic spray of of Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval may be sprayed against Taphrina leaf spot disease in turmeric.
		Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Early Cauliflower	Nursery		- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m <sup>2</sup> of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
		Plutella Diamond Black Moth	- There may be incidence of Plutella Diamond Black Moth in nursery. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
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.
Orange/Lime/ Lemon	Vegetative		Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk. 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.
		Fungal diseases	Prune the disease infected twigs and burn them outside the farm area. Spray Copper oxychloride @ 3ml/lit to control fungal disease.
		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Animal Sciences			
* Provide clean drinking water for birds and animals.			
- Apply Himax ointment twice daily on animal body to prevent bite of fly and mosquitoes.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - Avoid fungal infested feed. - Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft <sup>2</sup> area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
Pig	All age groups except the young ones	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
		Vaccination	- Vaccinate against FMD.
		Management	- Provide adequate amount of wholesome water (drinking). - Essential body salts may be provided.
Cattle	All age groups excepts the young ones	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Slush & Flood Management	Provide clean and wholesome water. Adequate arrangements for the animals to be kept at the safety place be made. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
		Milk fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.			





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**MANIPUR BULLETIN****21<sup>st</sup> July, 2017****Churachandpur**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 22<sup>nd</sup> to 26<sup>th</sup> July, 2017 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (18<sup>th</sup> to 20<sup>th</sup> July, 2017)**

Observed mainly cloudy to overcast sky and **17.3 mm** rainfall was recorded during past three days. Maximum temperature range of 26.0 to 28.2 °C and minimum temperature range of 21.7 to 23.2 °C with mean relative humidity 89.7 % max and 83.7 % min was recorded in the past three days.

**Weather forecast for next five days of Churachandpur (22<sup>nd</sup> to 26<sup>th</sup> July, 2017)**

Likely to have rains at isolated places with mainly cloudy to overcast sky and maximum temp. 32 - 34 °C & minimum temp. 24 - 25 °C. Relative humidity may reach up to 99 % (max RH) & 96 % (min RH). The average wind speed may be 2 km/hr.

**Seedling of rice may be raised using dry bed method with RC Maniphou-12 for transplanting before 15<sup>th</sup> August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot.**

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rice</b>	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> <li>- Gap filling of the rice seedlings should be done immediately in the fields that had been flooded.</li> <li>- 4 to 5 old seedlings (40-45days old) should be planted per hill.</li> <li>- For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised.</li> <li>- To have more tillers, avoid excess water in the field.</li> </ul>
			<ul style="list-style-type: none"> <li>- If transplanting was not done then complete transplanting before 31<sup>st</sup> July if seedlings is available.</li> <li>- During final leveling apply fertilizer @ 60-80 kg N, 40 kg P<sub>2</sub>O<sub>5</sub> and 30 kg K<sub>2</sub>O/ha with half of N, full of P<sub>2</sub>O<sub>5</sub> and 2/3 of K<sub>2</sub>O as basal dose before transplanting seedlings.</li> <li>- Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25 x 10cm using beaded rope.</li> <li>- Maintain a thin film of water upto 7 days after transplanting. Then increase water to 5-8cm.</li> <li>- Weed control: Apply Butachlor @ 25 kg/ha within one week of transplanting.</li> </ul>
		Upland area/ hill slopes	<ul style="list-style-type: none"> <li>- In upland area, hand weeding may be done. Off-type plants must be removed. Then top dressing of one-third of N and potash should be done at 25 days of transplanting after draining out complete water. After 48hrs of fertilization, the field should be re-irrigated maintaining depth of 5cm.</li> </ul>
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water after rain.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
	Direct seeding with drum seeder		<ul style="list-style-type: none"> <li>- The seeds may be sown when water level goes down.</li> <li>- Recommended rice var. RC Maniphou-7.</li> <li>- Treat seed with Humicil @ 5ml/kg seed.</li> <li>- Puddle the field and level properly.</li> <li>- Drain out water 24 hrs before sowing.</li> <li>- Use just pre-germinated seeds.</li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- At knee height stage, apply urea @ 43 kg Urea/ ha after rains.</li> <li>- Measures must be taken to avoid water logging in the crop field.</li> </ul>
<b>Soybean / Groundnut</b>	Vegetative		<ul style="list-style-type: none"> <li>- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
<b>Blackgram &amp; Rice bean</b>	Vegetative		<ul style="list-style-type: none"> <li>- Avoid sowing in water logged fields. Also, avoid hairy caterpillars.</li> </ul>
<b>Seeds storage</b>	Post harvest management		<ul style="list-style-type: none"> <li>- For seed purpose dry, clean and store the seeds in <b>RC-seed bins</b> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.</li> <li>- For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>

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**“Gramin Krishi Mausam Seva”**

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger	Vegetative to rhizome formation		Water soaked lesions may develop at the base of the pseudo-stem. Later on rotting may spread to the rhizome. To prevent it spray Redomil MZ72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
		Leaf spot	Prophylactic spray of of Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval may be sprayed against Taphrina leaf spot disease in turmeric.
		Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Early Cauliflower	Nursery		- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m <sup>2</sup> of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
		Plutella Diamond Black Moth	- There may be incidence of Plutella Diamond Black Moth in nursery. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraco nose	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.
Orange/Lime/ Lemon	Vegetative		Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk. 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.
		Fungal diseases	Prune the disease infected twigs and burn them outside the farm area. Spray Copper oxychloride @ 3ml/lit to control fungal disease.
		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Animal Sciences			
* Provide clean drinking water for birds and animals.			
- Apply Himax ointment twice daily on animal body to prevent bite of fly and mosquitoes.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - Avoid fungal infested feed. - Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft <sup>2</sup> area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
Pig	All age groups except the young ones	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
		Vaccination	- Vaccinate against FMD.
		Management	- Provide adequate amount of wholesome water (drinking). - Essential body salts may be provided.
Cattle	All age groups excepts the young ones	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Slush & Flood Management	Provide clean and wholesome water. Adequate arrangements for the animals to be kept at the safety place be made. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
		Milk fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.			



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





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

**MANIPUR BULLETIN****21<sup>st</sup> July, 2017****Senapati**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 22<sup>nd</sup> to 26<sup>th</sup> July, 2017 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (18<sup>th</sup> to 20<sup>th</sup> July, 2017)**

Observed mainly cloudy to overcast sky and **17.3 mm** rainfall was recorded during past three days. Maximum temperature range of 26.0 to 28.2 °C and minimum temperature range of 21.7 to 23.2 °C with mean relative humidity 89.7 % max and 83.7 % min was recorded in the past three days.

**Weather forecast for next five days of Senapati (22<sup>nd</sup> to 26<sup>th</sup> July, 2017)**

Likely to have rains at isolated places with mainly cloudy to overcast sky and maximum temp. 31 - 34 °C & minimum temp. 24 - 25 °C. Relative humidity may reach up to 97 % (max RH) & 85 % (min RH). The average wind speed may be 2-3 km/hr.

**Seedling of rice may be raised using dry bed method with RC Maniphou-12 for transplanting before 15<sup>th</sup> August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot.**

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rice</b>	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> <li>- Gap filling of the rice seedlings should be done immediately in the fields that had been flooded.</li> <li>- 4 to 5 old seedlings (40-45days old) should be planted per hill.</li> <li>- For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised.</li> <li>- To have more tillers, avoid excess water in the field.</li> </ul>
			<ul style="list-style-type: none"> <li>- If transplanting was not done then complete transplanting before 31<sup>st</sup> July if seedlings is available.</li> <li>- During final leveling apply fertilizer @ 60-80 kg N, 40 kg P<sub>2</sub>O<sub>5</sub> and 30 kg K<sub>2</sub>O/ha with half of N, full of P<sub>2</sub>O<sub>5</sub> and 2/3 of K<sub>2</sub>O as basal dose before transplanting seedlings.</li> <li>- Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25 x 10cm using beaded rope.</li> <li>- Maintain a thin film of water upto 7 days after transplanting. Then increase water to 5-8cm.</li> <li>- Weed control: Apply Butachlor @ 25 kg/ha within one week of transplanting.</li> </ul>
		Upland area/ hill slopes	<ul style="list-style-type: none"> <li>- In upland area, hand weeding may be done. Off-type plants must be removed. Then top dressing of one-third of N and potash should be done at 25 days of transplanting after draining out complete water. After 48hrs of fertilization, the field should be re-irrigated maintaining depth of 5cm.</li> </ul>
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water after rain.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
	Direct seeding with drum seeder		<ul style="list-style-type: none"> <li>- The seeds may be sown when water level goes down.</li> <li>- Recommended rice var. RC Maniphou-7.</li> <li>- Treat seed with Humicil @ 5ml/kg seed.</li> <li>- Puddle the field and level properly.</li> <li>- Drain out water 24 hrs before sowing.</li> <li>- Use just pre-germinated seeds.</li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- At knee height stage, apply urea @ 43 kg Urea/ ha after rains.</li> <li>- Measures must be taken to avoid water logging in the crop field.</li> </ul>
<b>Soybean / Groundnut</b>	Vegetative		<ul style="list-style-type: none"> <li>- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
<b>Blackgram &amp; Rice bean</b>	Vegetative		<ul style="list-style-type: none"> <li>- Avoid sowing in water logged fields. Also, avoid hairy caterpillars.</li> </ul>
<b>Seeds storage</b>	Post harvest management		<ul style="list-style-type: none"> <li>- For seed purpose dry, clean and store the seeds in <b>RC-seed bins</b> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.</li> <li>- For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>

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

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger	Vegetative to rhizome formation		Water soaked lesions may develop at the base of the pseudo-stem. Later on rotting may spread to the rhizome. To prevent it spray Redomil MZ72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
		Leaf spot	Prophylactic spray of of Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval may be sprayed against Taphrina leaf spot disease in turmeric.
		Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Early Cauliflower	Nursery		- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m <sup>2</sup> of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
		Plutella Diamond Black Moth	- There may be incidence of Plutella Diamond Black Moth in nursery. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mencozeb @ 2 g/lit water at 7 days interval.
		Anthraco nose	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.
Orange/Lime/ Lemon	Vegetative		Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk. 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.
		Fungal diseases	Prune the disease infected twigs and burn them outside the farm area. Spray Copper oxychloride @ 3ml/lit to control fungal disease.
		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Animal Sciences			
* Provide clean drinking water for birds and animals.			
- Apply Himax ointment twice daily on animal body to prevent bite of fly and mosquitoes.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - Avoid fungal infested feed. - Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft <sup>2</sup> area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
Pig	All age groups except the young ones	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
		Vaccination	- Vaccinate against FMD.
		Management	- Provide adequate amount of wholesome water (drinking). - Essential body salts may be provided.
Cattle	All age groups excepts the young ones	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Slush & Flood Management	Provide clean and wholesome water. Adequate arrangements for the animals to be kept at the safety place be made. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
		Milk fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.			





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**MANIPUR BULLETIN****21<sup>st</sup> July, 2017****Tamenglong**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 22<sup>nd</sup> to 26<sup>th</sup> July, 2017 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (18<sup>th</sup> to 20<sup>th</sup> July, 2017)**

Observed mainly cloudy to overcast sky and **17.3 mm** rainfall was recorded during past three days. Maximum temperature range of 26.0 to 28.2 °C and minimum temperature range of 21.7 to 23.2 °C with mean relative humidity 89.7 % max and 83.7 % min was recorded in the past three days.

**Weather forecast for next five days of Tamenglong (22<sup>nd</sup> to 26<sup>th</sup> July, 2017)**

Likely to have rains at isolated places with mainly cloudy to overcast sky and maximum temp. 32 - 34 °C & minimum temp. 24 - 25 °C. Relative humidity may reach up to 98 % (max RH) & 91 % (min RH). The average wind speed may be 2 km/hr.

**Seedling of rice may be raised using dry bed method with RC Maniphou-12 for transplanting before 15<sup>th</sup> August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot.**

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rice</b>	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> <li>- Gap filling of the rice seedlings should be done immediately in the fields that had been flooded.</li> <li>- 4 to 5 old seedlings (40-45days old) should be planted per hill.</li> <li>- For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised.</li> <li>- To have more tillers, avoid excess water in the field.</li> </ul>
			<ul style="list-style-type: none"> <li>- If transplanting was not done then complete transplanting before 31<sup>st</sup> July if seedlings is available.</li> <li>- During final leveling apply fertilizer @ 60-80 kg N, 40 kg P<sub>2</sub>O<sub>5</sub> and 30 kg K<sub>2</sub>O/ha with half of N, full of P<sub>2</sub>O<sub>5</sub> and 2/3 of K<sub>2</sub>O as basal dose before transplanting seedlings.</li> <li>- Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25 x 10cm using beaded rope.</li> <li>- Maintain a thin film of water upto 7 days after transplanting. Then increase water to 5-8cm.</li> <li>- Weed control: Apply Butachlor @ 25 kg/ha within one week of transplanting.</li> </ul>
		Upland area/ hill slopes	<ul style="list-style-type: none"> <li>- In upland area, hand weeding may be done. Off-type plants must be removed. Then top dressing of one-third of N and potash should be done at 25 days of transplanting after draining out complete water. After 48hrs of fertilization, the field should be re-irrigated maintaining depth of 5cm.</li> </ul>
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water after rain.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
	Direct seeding with drum seeder		<ul style="list-style-type: none"> <li>- The seeds may be sown when water level goes down.</li> <li>- Recommended rice var. RC Maniphou-7.</li> <li>- Treat seed with Humicil @ 5ml/kg seed.</li> <li>- Puddle the field and level properly.</li> <li>- Drain out water 24 hrs before sowing.</li> <li>- Use just pre-germinated seeds.</li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- At knee height stage, apply urea @ 43 kg Urea/ ha after rains.</li> <li>- Measures must be taken to avoid water logging in the crop field.</li> </ul>
<b>Soybean / Groundnut</b>	Vegetative		<ul style="list-style-type: none"> <li>- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
<b>Blackgram &amp; Rice bean</b>	Vegetative		<ul style="list-style-type: none"> <li>- Avoid sowing in water logged fields. Also, avoid hairy caterpillars.</li> </ul>
<b>Seeds storage</b>	Post harvest management		<ul style="list-style-type: none"> <li>- For seed purpose dry, clean and store the seeds in <b>RC-seed bins</b> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.</li> <li>- For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>

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Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger	Vegetative to rhizome formation		Water soaked lesions may develop at the base of the pseudo-stem. Later on rotting may spread to the rhizome. To prevent it spray Redomil MZ72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
		Leaf spot	Prophylactic spray of of Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval may be sprayed against Taphrina leaf spot disease in turmeric.
		Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Early Cauliflower	Nursery		- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m <sup>2</sup> of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
		Plutella Diamond Black Moth	- There may be incidence of Plutella Diamond Black Moth in nursery. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
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.
Orange/Lime/ Lemon	Vegetative		Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk. 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.
		Fungal diseases	Prune the disease infected twigs and burn them outside the farm area. Spray Copper oxychloride @ 3ml/lit to control fungal disease.
		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Animal Sciences			
* Provide clean drinking water for birds and animals.			
- Apply Himax ointment twice daily on animal body to prevent bite of fly and mosquitoes.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - Avoid fungal infested feed. - Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft <sup>2</sup> area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
Pig	All age groups except the young ones	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
		Vaccination	- Vaccinate against FMD.
		Management	- Provide adequate amount of wholesome water (drinking). - Essential body salts may be provided.
Cattle	All age groups excepts the young ones	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Slush & Flood Management	Provide clean and wholesome water. Adequate arrangements for the animals to be kept at the safety place be made. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
		Milk fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.			



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**MANIPUR BULLETIN****21<sup>st</sup> July, 2017****Thoubal**

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 22<sup>nd</sup> to 26<sup>th</sup> July, 2017 as below:

**Significant past weather for the preceding bi-weekly of Imphal - West (18<sup>th</sup> to 20<sup>th</sup> July, 2017)**

Observed mainly cloudy to overcast sky and **17.3 mm** rainfall was recorded during past three days. Maximum temperature range of 26.0 to 28.2 °C and minimum temperature range of 21.7 to 23.2 °C with mean relative humidity 89.7 % max and 83.7 % min was recorded in the past three days.

**Weather forecast for next five days of Thoubal (22<sup>nd</sup> to 26<sup>th</sup> July, 2017)**

Likely to have rains at isolated places with mainly cloudy to overcast sky and maximum temp. 32 - 34 °C & minimum temp. 24 - 25 °C. Relative humidity may reach up to 99 % (max RH) & 93 % (min RH). The average wind speed may be 2 - 4 km/hr.

**Seedling of rice may be raised using dry bed method with RC Maniphou-12 for transplanting before 15<sup>th</sup> August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot.**

<b>Field Crops</b>			
<b>Name of the crop</b>	<b>Stage</b>	<b>Pest and disease</b>	<b>Agro-meteorological advisories</b>
<b>Rice</b>	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> <li>- Gap filling of the rice seedlings should be done immediately in the fields that had been flooded.</li> <li>- 4 to 5 old seedlings (40-45days old) should be planted per hill.</li> <li>- For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised.</li> <li>- To have more tillers, avoid excess water in the field.</li> </ul>
			<ul style="list-style-type: none"> <li>- If transplanting was not done then complete transplanting before 31<sup>st</sup> July if seedlings is available.</li> <li>- During final leveling apply fertilizer @ 60-80 kg N, 40 kg P<sub>2</sub>O<sub>5</sub> and 30 kg K<sub>2</sub>O/ha with half of N, full of P<sub>2</sub>O<sub>5</sub> and 2/3 of K<sub>2</sub>O as basal dose before transplanting seedlings.</li> <li>- Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25 x 10cm using beaded rope.</li> <li>- Maintain a thin film of water upto 7 days after transplanting. Then increase water to 5-8cm.</li> <li>- Weed control: Apply Butachlor @ 25 kg/ha within one week of transplanting.</li> </ul>
		Upland area/ hill slopes	<ul style="list-style-type: none"> <li>- In upland area, hand weeding may be done. Off-type plants must be removed. Then top dressing of one-third of N and potash should be done at 25 days of transplanting after draining out complete water. After 48hrs of fertilization, the field should be re-irrigated maintaining depth of 5cm.</li> </ul>
		Thrips	Spray Lambdacythothrin 5% EC @ 15ml/15 litres of water after rain.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
	Direct seeding with drum seeder		<ul style="list-style-type: none"> <li>- The seeds may be sown when water level goes down.</li> <li>- Recommended rice var. RC Maniphou-7.</li> <li>- Treat seed with Hemicil @ 5ml/kg seed.</li> <li>- Puddle the field and level properly.</li> <li>- Drain out water 24 hrs before sowing.</li> <li>- Use just pre-germinated seeds.</li> </ul>
<b>Maize</b>	Vegetative		<ul style="list-style-type: none"> <li>- At knee height stage, apply urea @ 43 kg Urea/ ha after rains.</li> <li>- Measures must be taken to avoid water logging in the crop field.</li> </ul>
<b>Soybean / Groundnut</b>	Vegetative		<ul style="list-style-type: none"> <li>- Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain.</li> <li>- Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing.</li> </ul>
<b>Blackgram &amp; Rice bean</b>	Vegetative		<ul style="list-style-type: none"> <li>- Avoid sowing in water logged fields. Also, avoid hairy caterpillars.</li> </ul>
<b>Seeds storage</b>	Post harvest management		<ul style="list-style-type: none"> <li>- For seed purpose dry, clean and store the seeds in <b>RC-seed bins</b> after proper drying of seeds along with charcoal at 80:20. Check for moisture content or weight of charcoal and dry if required.</li> <li>- For grains, store grains in well ventilated godowns after drying proper. Spray Malathion 1% on the walls of stores.</li> </ul>

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

Manipur Centre, Lamphelpat, Imphal - 795 004

**“Gramin Krishi Mausam Seva”**

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Ginger	Vegetative to rhizome formation		Water soaked lesions may develop at the base of the pseudo-stem. Later on rotting may spread to the rhizome. To prevent it spray Redomil MZ72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
		Leaf spot	Prophylactic spray of of Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval may be sprayed against Taphrina leaf spot disease in turmeric.
		Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Early Cauliflower	Nursery		- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m <sup>2</sup> of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
		Plutella Diamond Black Moth	- There may be incidence of Plutella Diamond Black Moth in nursery. If the plant is young then hand picking is advised otherwise neem based pesticides may be sprayed.
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.
Orange/Lime/ Lemon	Vegetative		Apply 650g Urea, 1250g SSP and 450g MOP per tree in circular trench around the trunk. 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.
		Fungal diseases	Prune the disease infected twigs and burn them outside the farm area. Spray Copper oxychloride @ 3ml/lit to control fungal disease.
		Greening	- Spray Streptocycline @ 1g/10 lit of water or Tetracycline@5g/10 litre water.
Animal Sciences			
* Provide clean drinking water for birds and animals.			
- Apply Himax ointment twice daily on animal body to prevent bite of fly and mosquitoes.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Turkey/ Duck)	All age groups	Fowl Pox	Vaccinate against fowl pox.
		Coccidiosis	- Give Amprolium Powder @2g/lit of drinking water for 5 to 7 days.
		Deworming	➤ Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with half the dose at regular interval of 3 weeks.
			- Bleaching powder may be spread near farm premises. - Avoid fungal infested feed. - Use dry litter material in the shed, if moist apply lime powder @ 1kg per 100 ft <sup>2</sup> area.
Sheep/ Goat	All age groups	Vaccination	- Sheep should be vaccinated against B.Q./ H.S.
Pig	All age groups except the young ones	De-worming	- De-worming of animals should be done using Albendazole @7.5 mg/kg b.wt.
		Vaccination	- Vaccinate against FMD.
		Management	- Provide adequate amount of wholesome water (drinking). - Essential body salts may be provided.
Cattle	All age groups excepts the young ones	B.Q. & H.S.	Vaccinate against B.Q., F.M.D. & H.S.
		Deworming	Use Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		Slush & Flood Management	Provide clean and wholesome water. Adequate arrangements for the animals to be kept at the safety place be made. Avoid grazing at the periphery of flood. Animals should be protected against illness caused due to damp weather. Mineral mixtures/vitamins should be fed at this time. Do not allow to drink flood water.
		Milk fever in Milch cow	70-100ml of a mixture of Ca+ and Phosphorus daily @ 5-7days.
Apply Agri lime in the fish culture pond after the water level reaches normal depth after flood @ 30-35 kg /ha at 30days interval.			





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