



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

**MANIPUR BULLETIN****25th 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 26th to 30th July, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 24th July, 2017)

Observed mainly cloudy to overcast sky but partly cloudy during afternoon hours of 21st to morning hours of 22nd July and **28.8 mm** rainfall was recorded during past four days. Maximum temperature range of 27.8 to 30.2 °C and minimum temperature range of 21.3 to 23.4 °C with mean relative humidity 93.0 % max and 75.3 % min was recorded in the past four days.

Weather forecast for next five days of Tamenglong (26th to 30th July, 2017)

Likely to have light rains at isolated places with partly cloudy to overcast sky and maximum temp. 31 - 32 °C & minimum temp. 23 - 24 °C. Relative humidity may reach up to 98 % (max RH) & 78 % (min RH). The average wind speed may be 2-3 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> - Gap filling may be done immediately in the flood affected fields. - 2-3 old seedlings (40-45days old) should be planted per hill. - For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised. - Seedling of rice may also be raised using dry bed method with RC Maniphou-12 for transplanting before 15th August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot. - To have more tillers, avoid excess water in the field.
			<ul style="list-style-type: none"> - If transplanting was not done then complete transplanting before 15th August if seedlings is available. - 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. - Maintain a thin film of water upto 7 days after transplanting. Then raise water level to 5-8cm.
		Upland area/ hill slopes	<ul style="list-style-type: none"> - 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.
		Thrips	Spray Lambdacythrin 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"> - The seeds may be sown if the water level goes down. Recommended rice var. RC Maniphou-7. Treat seed with Hemicil @ 5ml/kg seed. Puddle the field and level properly. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Maize	Vegetative		<ul style="list-style-type: none"> - At knee height stage, apply urea @ 43 kg Urea/ ha after rains. - Measures must be taken to avoid water logging in the crop field.
Soybean / Groundnut	Vegetative		<ul style="list-style-type: none"> - Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain. - Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing. - Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Avoid sowing in water logged fields. Also, avoid hairy caterpillars.
Blackgram & Rice bean	Vegetative		
Seeds storage	Post harvest management		<ul style="list-style-type: none"> - For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with 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
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.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Early Cauliflower	Nursery	Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
			- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m ² of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mancozeb @ 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 Jaggery + 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.

Provide clean drinking water for birds and animals.			
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 ² 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. Keep animals in safe place. 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.			

(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****25th 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 26th to 30th July, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 24th July, 2017)

Observed mainly cloudy to overcast sky but partly cloudy during afternoon hours of 21st to morning hours of 22nd July and **28.8 mm** rainfall was recorded during past four days. Maximum temperature range of 27.8 to 30.2 °C and minimum temperature range of 21.3 to 23.4 °C with mean relative humidity 93.0 % max and 75.3 % min was recorded in the past four days.

Weather forecast for next five days of Thoubal (26th to 30th July, 2017)

Likely to have light rains at isolated places with partly cloudy to overcast sky and maximum temp. 30 - 32 °C & minimum temp. 23 - 24 °C. Relative humidity may reach up to 97 % (max RH) & 92 % (min RH). The average wind speed may be 4 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> - Gap filling may be done immediately in the flood affected fields. - 2-3 old seedlings (40-45days old) should be planted per hill. - For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised. - Seedling of rice may also be raised using dry bed method with RC Maniphou-12 for transplanting before 15th August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot. - To have more tillers, avoid excess water in the field.
			<ul style="list-style-type: none"> - If transplanting was not done then complete transplanting before 15th August if seedlings is available. - 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. - Maintain a thin film of water upto 7 days after transplanting. Then raise water level to 5-8cm.
		Upland area/ hill slopes	<ul style="list-style-type: none"> - 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.
		Thrips	Spray Lambdacythrin 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"> - The seeds may be sown if the water level goes down. Recommended rice var. RC Maniphou-7. Treat seed with Hemicil @ 5ml/kg seed. Puddle the field and level properly. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Maize	Vegetative		<ul style="list-style-type: none"> - At knee height stage, apply urea @ 43 kg Urea/ ha after rains. - Measures must be taken to avoid water logging in the crop field.
Soybean / Groundnut	Vegetative		<ul style="list-style-type: none"> - Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain. - Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing. - Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Avoid sowing in water logged fields. Also, avoid hairy caterpillars.
Blackgram & Rice bean	Vegetative		
Seeds storage	Post harvest management		<ul style="list-style-type: none"> - For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with 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
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.

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

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”

Early Cauliflower	Nursery	Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
			- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m ² of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mancozeb @ 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 Jaggery + 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.**

Provide clean drinking water for birds and animals.			
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 ² 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. Keep animals in safe place. 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.			

SMS:

Lakliba Nongmaging faoba nong khara chuba yai. Eshing thumjinbada shikhiba phou pambi gi mafamda numit 40-45ni shuraba louhon leiradi thadokpiyu. Pambi mashing khara yamnaba loufamda eshing yamdana thambiyu. Sitafol mahei pumba ngakthoknaba eshing litre amada 2g Metalxyl + Mancozeb happaga chayol ama kannaraga chaibiyu.

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



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**MANIPUR BULLETIN****25th July, 2017****Ukhrul**

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Weather forecast for next five days of Ukhrul (26th to 30th July, 2017)

Likely to have light rains at isolated places with partly cloudy to overcast sky and maximum temp. 32 - 33 °C & minimum temp. 24 - 23 °C. Relative humidity may reach up to 93 % (max RH) & 79 % (min RH). The average wind speed may be 2-3 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> - Gap filling may be done immediately in the flood affected fields. - 2-3 old seedlings (40-45days old) should be planted per hill. - For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised. - Seedling of rice may also be raised using dry bed method with RC Maniphou-12 for transplanting before 15th August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot. - To have more tillers, avoid excess water in the field.
			<ul style="list-style-type: none"> - If transplanting was not done then complete transplanting before 15th August if seedlings is available. - 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. - Maintain a thin film of water upto 7 days after transplanting. Then raise water level to 5-8cm.
		Upland area/ hill slopes	<ul style="list-style-type: none"> - 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.
		Thrips	Spray Lambdacythrin 5% EC @ 15ml/15 litres of water after rain.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
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Animal Sciences

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



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**MANIPUR BULLETIN****25th July, 2017****Imphal East**

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Weather forecast for next five days of Imphal East (26th to 30th July, 2017)

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		Thrips	Spray Lambdacythrin 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"> - The seeds may be sown if the water level goes down. Recommended rice var. RC Maniphou-7. Treat seed with Hemicil @ 5ml/kg seed. Puddle the field and level properly. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Maize	Vegetative		<ul style="list-style-type: none"> - At knee height stage, apply urea @ 43 kg Urea/ ha after rains. - Measures must be taken to avoid water logging in the crop field.
Soybean / Groundnut	Vegetative		<ul style="list-style-type: none"> - Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain. - Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing. - Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Avoid sowing in water logged fields. Also, avoid hairy caterpillars.
Blackgram & Rice bean	Vegetative		
Seeds storage	Post harvest management		<ul style="list-style-type: none"> - For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with 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
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.

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

Early Cauliflower	Nursery	Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
			- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m ² of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mancozeb @ 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 Jaggery + 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.**

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 ² 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. Keep animals in safe place. 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.**SMS:**

Lakliba Nongmaging faoba nong khara chuba yai. Eshing thumjinbada shikhiba phou pambi gi mafamda numit 40-45ni shuraba louhon leiradi thadokpiyu. Pambi mashing khara yamnaba loufamda eshing yamdana thambiyu. Sitafol mahei pumba ngakthoknaba eshing litre amada 2g Metalxyl + Mancozeb happaga chayol ama kannaraga chaibiyu.

(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****25th July, 2017****Imphal West**

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 26th to 30th July, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 24th July, 2017)

Observed mainly cloudy to overcast sky but partly cloudy during afternoon hours of 21st to morning hours of 22nd July and **28.8 mm** rainfall was recorded during past four days. Maximum temperature range of 27.8 to 30.2 °C and minimum temperature range of 21.3 to 23.4 °C with mean relative humidity 93.0 % max and 75.3 % min was recorded in the past four days.

Weather forecast for next five days of Imphal West (26th to 30th July, 2017)

Likely to have light rains at isolated places with partly cloudy to overcast sky and maximum temp. 30 - 32 °C & minimum temp. 22 - 23 °C. Relative humidity may reach up to 98 % (max RH) & 83 % (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
Rice	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> - Gap filling may be done immediately in the flood affected fields. - 2-3 old seedlings (40-45days old) should be planted per hill. - For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised. - Seedling of rice may also be raised using dry bed method with RC Maniphou-12 for transplanting before 15th August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot. - To have more tillers, avoid excess water in the field.
			<ul style="list-style-type: none"> - If transplanting was not done then complete transplanting before 15th August if seedlings is available. - 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. - Maintain a thin film of water upto 7 days after transplanting. Then raise water level to 5-8cm.
		Upland area/ hill slopes	<ul style="list-style-type: none"> - 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.
		Thrips	Spray Lambdacythrin 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"> - The seeds may be sown if the water level goes down. Recommended rice var. RC Maniphou-7. Treat seed with Hemicil @ 5ml/kg seed. Puddle the field and level properly. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Maize	Vegetative		<ul style="list-style-type: none"> - At knee height stage, apply urea @ 43 kg Urea/ ha after rains. - Measures must be taken to avoid water logging in the crop field.
Soybean / Groundnut	Vegetative		<ul style="list-style-type: none"> - Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain. - Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing. - Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Avoid sowing in water logged fields. Also, avoid hairy caterpillars.
Blackgram & Rice bean	Vegetative		
Seeds storage	Post harvest management		<ul style="list-style-type: none"> - For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with 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
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.

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

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”

Early Cauliflower	Nursery	Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
			- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m ² of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mancozeb @ 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 Jaggery + 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.**

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 ² 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. Keep animals in safe place. 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.**SMS:**

Lakliba Nongmaging faoba nong khara chuba yai. Eshing thumjinbada shikhiba phou pambi gi mafamda numit 40-45ni shuraba louhon leiradi thadokpiyu. Pambi mashing khara yamnaba loufamda eshing yamdana thambiyu. Sitafol mahei pumba ngakthoknaba eshing litre amada 2g Metalxyl + Mancozeb happaga chayol ama kannaraga chaibiyu.

(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****25th 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 26th to 30th July, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 24th July, 2017)

Observed mainly cloudy to overcast sky but partly cloudy during afternoon hours of 21st to morning hours of 22nd July and **28.8 mm** rainfall was recorded during past four days. Maximum temperature range of 27.8 to 30.2 °C and minimum temperature range of 21.3 to 23.4 °C with mean relative humidity 93.0 % max and 75.3 % min was recorded in the past four days.

Weather forecast for next five days of Bishnupur (26th to 30th July, 2017)

Likely to have light rains at isolated places with partly cloudy to overcast sky and maximum temp. 32 - 34 °C & minimum temp. 24 - 26 °C. Relative humidity may reach up to 97 % (max RH) & 86 % (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
Rice	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> - Gap filling may be done immediately in the flood affected fields. - 2-3 old seedlings (40-45days old) should be planted per hill. - For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised. - Seedling of rice may also be raised using dry bed method with RC Maniphou-12 for transplanting before 15th August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot. - To have more tillers, avoid excess water in the field.
			<ul style="list-style-type: none"> - If transplanting was not done then complete transplanting before 15th August if seedlings is available. - 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. - Maintain a thin film of water upto 7 days after transplanting. Then raise water level to 5-8cm.
		Upland area/ hill slopes	<ul style="list-style-type: none"> - 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.
		Thrips	Spray Lambdacythrin 5% EC @ 15ml/15 litres of water after rain.
	Direct seeding with drum seeder	Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
			<ul style="list-style-type: none"> - The seeds may be sown if the water level goes down. Recommended rice var. RC Maniphou-7. Treat seed with Hemicil @ 5ml/kg seed. Puddle the field and level properly. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Maize	Vegetative		<ul style="list-style-type: none"> - At knee height stage, apply urea @ 43 kg Urea/ ha after rains. - Measures must be taken to avoid water logging in the crop field.
Soybean / Groundnut	Vegetative		<ul style="list-style-type: none"> - Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain. - Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing. - Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Avoid sowing in water logged fields. Also, avoid hairy caterpillars.
Blackgram & Rice bean	Vegetative		
Seeds storage	Post harvest management		<ul style="list-style-type: none"> - For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with 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
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.

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

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”

Early Cauliflower	Nursery	Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
			- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m ² of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mancozeb @ 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 Jaggery + 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.**

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 ² 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. Keep animals in safe place. 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.**SMS:**

Lakliba Nongmaging faoba nong khara chuba yai. Eshing thumjinbada shikhiba phou pambi gi mafamda numit 40-45ni shuraba louhon leiradi thadokpiyu. Pambi mashing khara yamnaba loufamda eshing yamdana thambiyu. Sitafol mahei pumba ngakthoknaba eshing litre amada 2g Metalxyl + Mancozeb happaga chayol ama kannaraga chaibiyu.

(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****25th 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 26th to 30th July, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 24th July, 2017)

Observed mainly cloudy to overcast sky but partly cloudy during afternoon hours of 21st to morning hours of 22nd July and **28.8 mm** rainfall was recorded during past four days. Maximum temperature range of 27.8 to 30.2 °C and minimum temperature range of 21.3 to 23.4 °C with mean relative humidity 93.0 % max and 75.3 % min was recorded in the past four days.

Weather forecast for next five days of Chandel (26th to 30th July, 2017)

Likely to have light rains at isolated places with partly cloudy to overcast sky and maximum temp. 30 - 32 °C & minimum temp. 22 - 23 °C. Relative humidity may reach up to 96 % (max RH) & 87 % (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
Rice	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> - Gap filling may be done immediately in the flood affected fields. - 2-3 old seedlings (40-45days old) should be planted per hill. - For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised. - Seedling of rice may also be raised using dry bed method with RC Maniphou-12 for transplanting before 15th August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot. - To have more tillers, avoid excess water in the field.
			<ul style="list-style-type: none"> - If transplanting was not done then complete transplanting before 15th August if seedlings is available. - 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. - Maintain a thin film of water upto 7 days after transplanting. Then raise water level to 5-8cm.
		Upland area/ hill slopes	<ul style="list-style-type: none"> - 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.
		Thrips	Spray Lambdacythrin 5% EC @ 15ml/15 litres of water after rain.
	Direct seeding with drum seeder	Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
			<ul style="list-style-type: none"> - The seeds may be sown if the water level goes down. Recommended rice var. RC Maniphou-7. Treat seed with Hemicil @ 5ml/kg seed. Puddle the field and level properly. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Maize	Vegetative		<ul style="list-style-type: none"> - At knee height stage, apply urea @ 43 kg Urea/ ha after rains. - Measures must be taken to avoid water logging in the crop field.
Soybean / Groundnut	Vegetative		<ul style="list-style-type: none"> - Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain. - Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing. - Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Avoid sowing in water logged fields. Also, avoid hairy caterpillars.
Blackgram & Rice bean	Vegetative		
Seeds storage	Post harvest management		<ul style="list-style-type: none"> - For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with 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
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.

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

Early Cauliflower	Nursery	Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
			- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m ² of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mancozeb @ 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 Jaggery + 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.**

Provide clean drinking water for birds and animals.			
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 ² 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. Keep animals in safe place. 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.			

SMS:

Lakliba Nongmaging faoba nong khara chuba yai. Eshing thumjinbada shikhiba phou pambi gi mafamda numit 40-45ni shuraba louhon leiradi thadokpiyu. Pambi mashing khara yamnaba loufamda eshing yamdana thambiyu. Sitafol mahei pumba ngakthoknaba eshing litre amada 2g Metalxyl + Mancozeb happaga chayol ama kannaraga chaibiyu.

(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****25th 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 26th to 30th July, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 24th July, 2017)

Observed mainly cloudy to overcast sky but partly cloudy during afternoon hours of 21st to morning hours of 22nd July and **28.8 mm** rainfall was recorded during past four days. Maximum temperature range of 27.8 to 30.2 °C and minimum temperature range of 21.3 to 23.4 °C with mean relative humidity 93.0 % max and 75.3 % min was recorded in the past four days.

Weather forecast for next five days of Churachandpur (26th to 30th July, 2017)

Likely to have light rains at isolated places with partly cloudy to overcast sky and maximum temp. 32 - 33 °C & minimum temp. 23 - 24 °C. Relative humidity may reach up to 98 % (max RH) & 80 % (min RH). The average wind speed may be 2 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> - Gap filling may be done immediately in the flood affected fields. - 2-3 old seedlings (40-45days old) should be planted per hill. - For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised. - Seedling of rice may also be raised using dry bed method with RC Maniphou-12 for transplanting before 15th August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot. - To have more tillers, avoid excess water in the field.
			<ul style="list-style-type: none"> - If transplanting was not done then complete transplanting before 15th August if seedlings is available. - 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. - Maintain a thin film of water upto 7 days after transplanting. Then raise water level to 5-8cm.
		Upland area/ hill slopes	<ul style="list-style-type: none"> - 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.
		Thrips	Spray Lambdacythrin 5% EC @ 15ml/15 litres of water after rain.
	Direct seeding with drum seeder	Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
			<ul style="list-style-type: none"> - The seeds may be sown if the water level goes down. Recommended rice var. RC Maniphou-7. Treat seed with Hemicil @ 5ml/kg seed. Puddle the field and level properly. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Maize	Vegetative		<ul style="list-style-type: none"> - At knee height stage, apply urea @ 43 kg Urea/ ha after rains. - Measures must be taken to avoid water logging in the crop field.
Soybean / Groundnut	Vegetative		<ul style="list-style-type: none"> - Earthing-up and thinning may be done at 30 to 40 days after sowing of crop after rain. - Avoid leaf eating caterpillars/ insects at least upto 60 days after sowing. - Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Avoid sowing in water logged fields. Also, avoid hairy caterpillars.
Blackgram & Rice bean	Vegetative		
Seeds storage	Post harvest management		<ul style="list-style-type: none"> - For seed purpose dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with 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
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.

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

Early Cauliflower	Nursery	Rhizome rot	Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
			- For nursery rising of early cauliflower in 10-15cm high beds under temporary rain shelter, apply 1-2 kg FYM/ m ² of nursery bed. Drench the soil with Carbendazim or Captan 50 W.P. Select early varieties like Early Himlata, White shot, etc.
Passion Fruit	Fruiting	Fruit rot	Spray Metalxyl + Mancozeb @ 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 Jaggery + 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.**

Provide clean drinking water for birds and animals.			
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 ² 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. Keep animals in safe place. 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.			

SMS:

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

**MANIPUR BULLETIN****25th 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 26th to 30th July, 2017 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 24th July, 2017)

Observed mainly cloudy to overcast sky but partly cloudy during afternoon hours of 21st to morning hours of 22nd July and **28.8 mm** rainfall was recorded during past four days. Maximum temperature range of 27.8 to 30.2 °C and minimum temperature range of 21.3 to 23.4 °C with mean relative humidity 93.0 % max and 75.3 % min was recorded in the past four days.

Weather forecast for next five days of Senapati (26th to 30th July, 2017)

Likely to have light rains at isolated places with partly cloudy to overcast sky and maximum temp. 30 - 32 °C & minimum temp. 23 - 24 °C. Relative humidity may reach up to 95 % (max RH) & 82 % (min RH). The average wind speed may be 2-3 km/hr.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Transplanting to tillering (kharif rice)	Low lying area	<ul style="list-style-type: none"> - Gap filling may be done immediately in the flood affected fields. - 2-3 old seedlings (40-45days old) should be planted per hill. - For flooded areas, contingency nurseries with late variety/ cold tolerant variety RC Maniphou 7 may be raised. - Seedling of rice may also be raised using dry bed method with RC Maniphou-12 for transplanting before 15th August. Prepare 20 plots for transplanting in a hectare field. Plot size is 4 x 20 feet and sow seeds @ 2kg/ plot. - To have more tillers, avoid excess water in the field.
			<ul style="list-style-type: none"> - If transplanting was not done then complete transplanting before 15th August if seedlings is available. - 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. - Maintain a thin film of water upto 7 days after transplanting. Then raise water level to 5-8cm.
		Upland area/ hill slopes	<ul style="list-style-type: none"> - 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.
		Thrips	Spray Lambdacythrin 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"> - The seeds may be sown if the water level goes down. Recommended rice var. RC Maniphou-7. Treat seed with Hemicil @ 5ml/kg seed. Puddle the field and level properly. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
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