

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 19th July, 2019*District: Tamenglong***Past weather for the of Imphal West (16th to 18th July, 19):**

0.1 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but clear during morning hours of 18th July, 19. Maximum temperature ranged from 30.0 – 35.0 °C and minimum of 20.2 – 22.0 °C. Mean relative humidity of 85.7 % max & 56.0 % min was recorded in the past three days & average wind speed was 1.8 – 3.4 km/ hr.

Weather forecast for Tamenglong (20th to 24th July, 2019):

Likely to have light rains on Saturday and Sunday then moderate rains from Monday. The sky will remain partly cloudy to mainly cloudy and overcast thereafter with max. temp. 29-32 °C & mini. temp. 20-21 °C. Relative humidity may reach upto 99 % (max) & 79 % (min). The average wind speed may be 3-4 km/hr.

General Advisory:

1. Monitor insect pest infestation and water requirement in the crop field.
2. Sprays of insects pest mentioned below may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm.
		Thrips	- Use Blue Sticky Cards @ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- Spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation	Fall Army Worm	- Apply Emamectin benzoate @ 4g/litre water or Spinosad @ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - For crops in vegetative stage, second hand weeding may be done nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide.
Millet	Sowing		- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
			- Prune the disease infected twigs and burn them outside the farm area. - Spray Copper oxychloride @ 3ml/lit to control fungal disease.
Early Cauliflower	Nursery to transplanting		- For nursery raising of early cauliflower in 10-15cm high beds under temporary rain shelter in upland area, 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. - Transplanting of raised seedlings may be done. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation. - Transplant healthy seedlings at a spacing of 45cm x 45cm.
Turmeric + French Bean	Rhizome formation in turmeric		- Sow short duration crop like Pant Anupam as intercrop with turmeric. - Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Chilli	Fruiting to harvesting	Anthracoze	- After harvesting mature fruits, spray Mancozeb @ 2 g/ lit of water at 7 to 10 days interval twice or thrice depending upon the incidence.



Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Endoparasite/ Ectoparasite	- Inject Parid @ 1 ml/ 50 kg body weight.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

(I. Meghachandra Singh)
 Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 19th July, 2019*District: Thoubal***Past weather for the of Imphal West (16th to 18th July, 19):**

0.1 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but clear during morning hours of 18th July, 19. Maximum temperature ranged from 30.0 – 35.0 °C and minimum of 20.2 – 22.0 °C. Mean relative humidity of 85.7 % max & 56.0 % min was recorded in the past three days & average wind speed was 1.8 – 3.4 km/ hr.

Weather forecast for Thoubal (20th to 24th July, 2019):

Likely to have light rains on Saturday and Sunday then moderate rains from Monday. The sky will remain partly cloudy to mainly cloudy and overcast thereafter with max. temp. 30-34 °C & mini. temp. 20-21 °C. Relative humidity may reach upto 99 % (max) & 72 % (min). The average wind speed may be 4-7 km/hr.

General Advisory:

1. Monitor insect pest infestation and water requirement in the crop field.
2. Sprays of insects pest mentioned below may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm.
		Thrips	- Use Blue Sticky Cards @ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- Spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation	Fall Army Worm	- Apply Emamectin benzoate @ 4g/litre water or Spinosad @ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - For crops in vegetative stage, second hand weeding may be done nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide.
Millet	Sowing		- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
			- Prune the disease infected twigs and burn them outside the farm area. - Spray Copper oxychloride @ 3ml/lit to control fungal disease.
Early Cauliflower	Nursery to transplanting		- For nursery raising of early cauliflower in 10-15cm high beds under temporary rain shelter in upland area, 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. - Transplanting of raised seedlings may be done. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation. - Transplant healthy seedlings at a spacing of 45cm x 45cm.
Turmeric + French Bean	Rhizome formation in turmeric		- Sow short duration crop like Pant Anupam as intercrop with turmeric. - Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Chilli	Fruiting to harvesting	Anthracoze	- After harvesting mature fruits, spray Mancozeb @ 2 g/ lit of water at 7 to 10 days interval twice or thrice depending upon the incidence.



Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Endoparasite/ Ectoparasite	- Inject Parid @ 1 ml/ 50 kg body weight.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

(I. Meghachandra Singh)
 Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 19th July, 2019

District: Ukhrul

Past weather for the of Imphal West (16th to 18th July, 19):

0.1 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but clear during morning hours of 18th July, 19. Maximum temperature ranged from 30.0 – 35.0 °C and minimum of 20.2 – 22.0 °C. Mean relative humidity of 85.7 % max & 56.0 % min was recorded in the past three days & average wind speed was 1.8 – 3.4 km/ hr.

Weather forecast for Ukhrul (20th to 24th July, 2019):

Likely to have light rains on Saturday and Sunday then moderate rains from Monday. The sky will remain partly cloudy to mainly cloudy and overcast thereafter with max. temp. 29-32 °C & mini. temp. 20-21 °C. Relative humidity may reach upto 98 % (max) & 85 % (min). The average wind speed may be 3-4 km/hr.

General Advisory:

1. Monitor insect pest infestation and water requirement in the crop field.
2. Sprays of insects pest mentioned below may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm.
		Thrips	- Use Blue Sticky Cards @ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- Spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation	Fall Army Worm	- Apply Emamectin benzoate @ 4g/litre water or Spinosad @ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - For crops in vegetative stage, second hand weeding may be done nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide.
Millet	Sowing		- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
			- Prune the disease infected twigs and burn them outside the farm area. - Spray Copper oxychloride @ 3ml/lit to control fungal disease.
Early Cauliflower	Nursery to transplanting		- For nursery raising of early cauliflower in 10-15cm high beds under temporary rain shelter in upland area, 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. - Transplanting of raised seedlings may be done. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation. - Transplant healthy seedlings at a spacing of 45cm x 45cm.
Turmeric + French Bean	Rhizome formation in turmeric		- Sow short duration crop like Pant Anupam as intercrop with turmeric. - Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Chilli	Fruiting to harvesting	Anthracoze	- After harvesting mature fruits, spray Mancozeb @ 2 g/ lit of water at 7 to 10 days interval twice or thrice depending upon the incidence.



Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Endoparasite/ Ectoparasite	- Inject Parid @ 1 ml/ 50 kg body weight.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

(I. Meghachandra Singh)
 Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 19th July, 2019*District: Bishnupur***Past weather for the of Imphal West (16th to 18th July, 19):**

0.1 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but clear during morning hours of 18th July, 19. Maximum temperature ranged from 30.0 – 35.0 °C and minimum of 20.2 – 22.0 °C. Mean relative humidity of 85.7 % max & 56.0 % min was recorded in the past three days & average wind speed was 1.8 – 3.4 km/ hr.

Weather forecast for Bishnupur (20th to 24th July, 2019):

Likely to have light rains on Saturday and Sunday then moderate rains from Monday. The sky will remain partly cloudy to mainly cloudy and overcast thereafter with max. temp. 33-35 °C & mini. temp. 20-21 °C. Relative humidity may reach upto 100 % (max) & 67 % (min). The average wind speed may be 3-5 km/hr.

General Advisory:

1. Monitor insect pest infestation and water requirement in the crop field.
2. Sprays of insects pest mentioned below may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm.
		Thrips	- Use Blue Sticky Cards @ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- Spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation	Fall Army Worm	- Apply Emamectin benzoate @ 4g/litre water or Spinosad @ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - For crops in vegetative stage, second hand weeding may be done nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide.
Millet	Sowing		- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
			- Prune the disease infected twigs and burn them outside the farm area. - Spray Copper oxychloride @ 3ml/lit to control fungal disease.
Early Cauliflower	Nursery to transplanting		- For nursery raising of early cauliflower in 10-15cm high beds under temporary rain shelter in upland area, 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. - Transplanting of raised seedlings may be done. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation. - Transplant healthy seedlings at a spacing of 45cm x 45cm.
Turmeric + French Bean	Rhizome formation in turmeric		- Sow short duration crop like Pant Anupam as intercrop with turmeric. - Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Chilli	Fruiting to harvesting	Anthrachnose	- After harvesting mature fruits, spray Mancozeb @ 2 g/ lit of water at 7 to 10 days interval twice or thrice depending upon the incidence.



Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
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		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Endoparasite/ Ectoparasite	- Inject Parid @ 1 ml/ 50 kg body weight.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
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(I. Meghachandra Singh)
Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 19th July, 2019*District: Chandel***Past weather for the of Imphal West (16th to 18th July, 19):**

0.1 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but clear during morning hours of 18th July, 19. Maximum temperature ranged from 30.0 – 35.0 °C and minimum of 20.2 – 22.0 °C. Mean relative humidity of 85.7 % max & 56.0 % min was recorded in the past three days & average wind speed was 1.8 – 3.4 km/ hr.

Weather forecast for Chandel (20th to 24th July, 2019):

Likely to have light rains on Saturday and Sunday then moderate rains from Monday. The sky will remain partly cloudy to mainly cloudy and overcast thereafter with max. temp. 30-34 °C & mini. temp. 20-21 °C. Relative humidity may reach upto 98 % (max) & 64 % (min). The average wind speed may be 3-5 km/hr.

General Advisory:

1. Monitor insect pest infestation and water requirement in the crop field.
2. Sprays of insects pest mentioned below may be done before rains.

Field Crops			
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		Thrips	- Use Blue Sticky Cards @ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- Spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation	Fall Army Worm	- Apply Emamectin benzoate @ 4g/litre water or Spinosad @ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - For crops in vegetative stage, second hand weeding may be done nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide.
Millet	Sowing		- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
			- Prune the disease infected twigs and burn them outside the farm area. - Spray Copper oxychloride @ 3ml/lit to control fungal disease.
Early Cauliflower	Nursery to transplanting		- For nursery raising of early cauliflower in 10-15cm high beds under temporary rain shelter in upland area, 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. - Transplanting of raised seedlings may be done. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation. - Transplant healthy seedlings at a spacing of 45cm x 45cm.
Turmeric + French Bean	Rhizome formation in turmeric		- Sow short duration crop like Pant Anupam as intercrop with turmeric. - Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Chilli	Fruiting to harvesting	Anthracoze	- After harvesting mature fruits, spray Mancozeb @ 2 g/ lit of water at 7 to 10 days interval twice or thrice depending upon the incidence.



Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Endoparasite/ Ectoparasite	- Inject Parid @ 1 ml/ 50 kg body weight.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

(I. Meghachandra Singh)
 Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 19th July, 2019*District: Churachandpur***Past weather for the of Imphal West (16th to 18th July, 19):**

0.1 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but clear during morning hours of 18th July, 19. Maximum temperature ranged from 30.0 – 35.0 °C and minimum of 20.2 – 22.0 °C. Mean relative humidity of 85.7 % max & 56.0 % min was recorded in the past three days & average wind speed was 1.8 – 3.4 km/ hr.

Weather forecast for Churachandpur (20th to 24th July, 2019):

Likely to have light rains on Saturday and Sunday then moderate rains from Monday. The sky will remain partly cloudy to mainly cloudy and overcast thereafter with max. temp. 33-35 °C & mini. temp. 20-21 °C. Relative humidity may reach upto 99 % (max) & 73 % (min). The average wind speed may be 3 km/hr.

General Advisory:

1. Monitor insect pest infestation and water requirement in the crop field.
2. Sprays of insects pest mentioned below may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm.
		Thrips	- Use Blue Sticky Cards @ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- Spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation	Fall Army Worm	- Apply Emamectin benzoate @ 4g/litre water or Spinosad @ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - For crops in vegetative stage, second hand weeding may be done nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide.
Millet	Sowing		- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate. - Prune the disease infected twigs and burn them outside the farm area. - Spray Copper oxychloride @ 3ml/lit to control fungal disease.
Early Cauliflower	Nursery to transplanting		- For nursery raising of early cauliflower in 10-15cm high beds under temporary rain shelter in upland area, 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. - Transplanting of raised seedlings may be done. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation. - Transplant healthy seedlings at a spacing of 45cm x 45cm.
Turmeric + French Bean	Rhizome formation in turmeric		- Sow short duration crop like Pant Anupam as intercrop with turmeric. - Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Chilli	Fruiting to harvesting	Anthrachnose	- After harvesting mature fruits, spray Mancozeb @ 2 g/ lit of water at 7 to 10 days interval twice or thrice depending upon the incidence.



Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Endoparasite/ Ectoparasite	- Inject Parid @ 1 ml/ 50 kg body weight.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

(I. Meghachandra Singh)
 Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 19th July, 2019*District: Imphal East***Past weather for the of Imphal West (16th to 18th July, 19):**

0.1 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but clear during morning hours of 18th July, 19. Maximum temperature ranged from 30.0 – 35.0 °C and minimum of 20.2 – 22.0 °C. Mean relative humidity of 85.7 % max & 56.0 % min was recorded in the past three days & average wind speed was 1.8 – 3.4 km/ hr.

Weather forecast for Imphal East (20th to 24th July, 2019):

Likely to have light rains on Saturday and Sunday then moderate rains from Monday. The sky will remain partly cloudy to mainly cloudy and overcast thereafter with max. temp. 33-35 °C & mini. temp. 20-21 °C. Relative humidity may reach upto 97 % (max) & 84 % (min). The average wind speed may be 5-6 km/hr.

General Advisory:

1. Monitor insect pest infestation and water requirement in the crop field.
2. Sprays of insects pest mentioned below may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm.
		Thrips	- Use Blue Sticky Cards @ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- Spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation	Fall Army Worm	- Apply Emamectin benzoate @ 4g/litre water or Spinosad @ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - For crops in vegetative stage, second hand weeding may be done nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide.
Millet	Sowing		- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
			- Prune the disease infected twigs and burn them outside the farm area. - Spray Copper oxychloride @ 3ml/lit to control fungal disease.
Early Cauliflower	Nursery to transplanting		- For nursery raising of early cauliflower in 10-15cm high beds under temporary rain shelter in upland area, 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. - Transplanting of raised seedlings may be done. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation. - Transplant healthy seedlings at a spacing of 45cm x 45cm.
Turmeric + French Bean	Rhizome formation in turmeric		- Sow short duration crop like Pant Anupam as intercrop with turmeric. - Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Chilli	Fruiting to harvesting	Anthrachnose	- After harvesting mature fruits, spray Mancozeb @ 2 g/ lit of water at 7 to 10 days interval twice or thrice depending upon the incidence.



Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Endoparasite/ Ectoparasite	- Inject Parid @ 1 ml/ 50 kg body weight.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

(I. Meghachandra Singh)
 Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 19th July, 2019*District: Imphal West***Past weather for the of Imphal West (16th to 18th July, 19):**

0.1 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but clear during morning hours of 18th July, 19. Maximum temperature ranged from 30.0 – 35.0 °C and minimum of 20.2 – 22.0 °C. Mean relative humidity of 85.7 % max & 56.0 % min was recorded in the past three days & average wind speed was 1.8 – 3.4 km/ hr.

Weather forecast for Imphal West (20th to 24th July, 2019):

Likely to have light rains on Saturday and Sunday then moderate rains from Monday. The sky will remain partly cloudy to mainly cloudy and overcast thereafter with max. temp. 33-35 °C & mini. temp. 20-21 °C. Relative humidity may reach upto 99 % (max) & 65 % (min). The average wind speed may be 4-5 km/hr.

General Advisory:

1. Monitor insect pest infestation and water requirement in the crop field.
2. Sprays of insects pest mentioned below may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm.
		Thrips	- Use Blue Sticky Cards @ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- Spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation	Fall Army Worm	- Apply Emamectin benzoate @ 4g/litre water or Spinosad @ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - For crops in vegetative stage, second hand weeding may be done nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide.
Millet	Sowing		- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate. - Prune the disease infected twigs and burn them outside the farm area. - Spray Copper oxychloride @ 3ml/lit to control fungal disease.
Early Cauliflower	Nursery to transplanting		- For nursery raising of early cauliflower in 10-15cm high beds under temporary rain shelter in upland area, 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. - Transplanting of raised seedlings may be done. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation. - Transplant healthy seedlings at a spacing of 45cm x 45cm.
Turmeric + French Bean	Rhizome formation in turmeric		- Sow short duration crop like Pant Anupam as intercrop with turmeric. - Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Chilli	Fruiting to harvesting	Anthrachnose	- After harvesting mature fruits, spray Mancozeb @ 2 g/ lit of water at 7 to 10 days interval twice or thrice depending upon the incidence.



Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Endoparasite/ Ectoparasite	- Inject Parid @ 1 ml/ 50 kg body weight.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

(I. Meghachandra Singh)
 Nodal Officer, GKMS

**MANIPUR AGROMET ADVISORY BULLETIN**Date of issue: 19th July, 2019*District: Senapati***Past weather for the of Imphal West (16th to 18th July, 19):**

0.1 mm rainfall was observed during the past three days. The skies remained partly cloudy to mainly cloudy but clear during morning hours of 18th July, 19. Maximum temperature ranged from 30.0 – 35.0 °C and minimum of 20.2 – 22.0 °C. Mean relative humidity of 85.7 % max & 56.0 % min was recorded in the past three days & average wind speed was 1.8 – 3.4 km/ hr.

Weather forecast for Senapati (20th to 24th July, 2019):

Likely to have light rains on Saturday and Sunday then moderate rains from Monday. The sky will remain partly cloudy to mainly cloudy and overcast thereafter with max. temp. 29-31 °C & mini. temp. 20-21 °C. Relative humidity may reach upto 99 % (max) & 94 % (min). The average wind speed may be 3-4 km/hr.

General Advisory:

1. Monitor insect pest infestation and water requirement in the crop field.
2. Sprays of insects pest mentioned below may be done before rains.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Kharif Rice	Main field preparation and transplanting		- Choose medium or late variety of rice. - Uproot the seedlings at 16-21 days after sowing. Transplant at a spacing of 20x10cm.
		Thrips	- Use Blue Sticky Cards @ 4 cards/ sangam or spray Chloropyriphos @ 1ml/ litre water against Thrips.
		Bacterial Leaf Blight	- Spray Streptocycline @ 3g/ litre water against Bacterial Leaf Blight.
	Direct seeding with drum seeder		- Treat seed with Humicil @ 5ml/ kg seed. Puddle the field properly and level it. Drain out water 24 hrs before sowing. Use just pre-germinated seeds.
Kharif maize	Vegetative/ cob initiation	Fall Army Worm	- Apply Emamectin benzoate @ 4g/litre water or Spinosad @ 3ml/ litre water.
Soybean/ Groundnut/ Blackgram/ Rice Bean	Sowing to Vegetative		- Sowing may be done in upland fields. Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - For crops in vegetative stage, second hand weeding may be done nearly at 35 days after sowing to avoid leaf eating insects/hairy caterpillars. - Avoid earthing up after 40 days of sowing in groundnut .
		hairy caterpillars	- For control of red hairy caterpillars, apply any contact insecticide.
Millet	Sowing		- Treat seeds with Carbendazim @ 2g/ kg seeds before sowing. - Line sowing at a spacing of 25-30cm row to row with depth of 2-3cm.
Seed storage	Post-harvest Management		- For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.

Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Orange/Lime/ Lemon/Papaya/ Litchi/ Tree bean	Planting	Lichen incidence	- If lichen is observed, then scrap out the affected area and paint with Bordeaux paste or Benlate.
			- Prune the disease infected twigs and burn them outside the farm area. - Spray Copper oxychloride @ 3ml/lit to control fungal disease.
Early Cauliflower	Nursery to transplanting		- For nursery raising of early cauliflower in 10-15cm high beds under temporary rain shelter in upland area, 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. - Transplanting of raised seedlings may be done. Add 10kg urea + 50 kg DAP + 40 kg MOP with 10 cart loads of FYM per sangam as basal dose at final land preparation. - Transplant healthy seedlings at a spacing of 45cm x 45cm.
Turmeric + French Bean	Rhizome formation in turmeric		- Sow short duration crop like Pant Anupam as intercrop with turmeric. - Spray Dithane M-45 @ 2.5 gm/ lit of water to prevent rhizome rot disease.
Chilli	Fruiting to harvesting	Anthrachnose	- After harvesting mature fruits, spray Mancozeb @ 2 g/ lit of water at 7 to 10 days interval twice or thrice depending upon the incidence.



Animal Sciences			
Name of bird/ animal	Stage	Disease/ Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All susceptible age groups	Endoparasites	- De-worm using Piperazine citrate. - Give antibiotic like Sulpha drug @ 30-40 ml/ 100 birds.
		Coccidiosis	- As a preventive measure against Coccidiosis, provide Supercox @ 1g/ lit of water.
		coli bacillosis	Add sanitizer in drinking water and avoid muddy water for drinking purpose.
Pig	Above 3 months of age	Coccidial infection	- Ofloxacin/ Ornidazole (O ₂) tab twice daily for 5 days.
		Endo/ Ecto parasite or skin infection	- Inject Neomac @ 1 ml/ 10 kg body weight.
		Management	- Treat drinking water with potassium permanganate/ sanitizer. Provide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds.
Cattle	Above 3 months of age	Faciolasis	- De-worming with suitable Anthelmatics against Faciolasis.
		Endoparasite/ Ectoparasite	- Inject Parid @ 1 ml/ 50 kg body weight.
		Management	- Provide wholesome water. Protection from high temp may be ensured. - Electrolytes in the form of powder/ liquid may be given. Increase salt level in feed. - Protect animals from PICA (depraved appetite) by providing essential body salts (mineral forte powder) 25g/day.
Goat	All age groups except three months or below	Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		Endoparasite/ Ectoparasite	Deworm using Minthal bolus @ ½ bolus per 20 kg body weight accompanied with Livozyme @ 50ml daily.
		Management	- Fly repellent must be used. Disinfection of farm and premises are to be carried out strictly. Due care need to be taken to prevent spread of disease caused by flies/ mosquitoes/ ticks, etc.
Fishery:			
Carp culture	Seed production	Pond and Water	1. Water depth should be maintained at 2.0 m 2. Apply lime 30 Kg/ha every 30 days interval
		Feed	Provide Nutritionally well balanced feed @ 3.5% body weight per day in two splits
		Fish	Select fully matured male and female brood fish for induced breeding
Hatchery Unit	1. Use only clean hapas (if hapa breeding is done) and incubators 2. Put only recommended no. of eggs in the hatching pools (1.0-1.2 millions of eggs/1.4 diameter, 0.98 m height and 1275 litre of water capacity) 3. Supply only good water quality having optimum dissolved oxygen and PH level for hatching.		

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 Nodal Officer, GKMS