



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

**MANIPUR BULLETIN****24th August, 2018****Imphal East**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 25th to 29th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 23rd August, 2018)

Observed **3.6 mm** rainfall with **mainly cloudy sky** but **partly cloudy** during morning hours of 21st Aug. Maximum temperature recorded ranged from **29.9** to **31.6 °C** and minimum of **21.2** to **23.0 °C** with mean relative humidity **89.7 %** max and **64.7 %** min was recorded in the past four days & average wind speed was **3.5 – 4.6 km/ hr.**

Weather forecast for next five days of Imphal East (25th to 29th August, 2018)

Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. **29-32 °C** & minimum temp. **22-23 °C**. Relative humidity may reach upto **100 %** (max RH) & **79 %** (min RH). The average wind speed may be **0-2 km/hr.**

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle Initiation		- Maintain water level of 5-8cm. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder	Spray Thiomethoxam @ 5 gm/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
Soybean/ Groundnut	Flowering to pegging		- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut Rust in soybean	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Flowering to fruiting		- Hand weeding should be done if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Land preparation to sowing		Field preparation for sowing French bean for both dwarf and pole type must be completed by the end of August for sowing. However, water logged areas and too much wet soil should be avoided. Raised beds are preferred.
Brinjal	Fruiting to harvesting		For fruit and shoot borer of brinjal, harvest mature ones and <i>Decis (Deltamethrin 12 %)</i> @ 7ml /15 lit of water may be sprayed.
Kiwi fruit			- If the vine is infected by collar rot disease, spray copper fungicide or Redomil @ 2.5g/ lit of water and soil drenching with 1% Bordeaux mixture.
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.



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



King Chilli	Fruiting to harvesting	Fruit rot	- It can be controlled by using a combination of biocontrol agents, <i>Trichoderma viride</i> and <i>Pseudomonas fluorescens</i> or spray Bavistin (0.1%).
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.
Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.

Animal Sciences

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

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Management	• Do not allow to consume muddy water to protect from <i>E.coli</i> infection. Use water sanitizer.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(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****24th August, 2018****Imphal West**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 25th to 29th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 23rd August, 2018)

Observed **3.6 mm** rainfall with **mainly cloudy sky** but **partly cloudy** during morning hours of 21st Aug. Maximum temperature recorded ranged from **29.9** to **31.6 °C** and minimum of **21.2** to **23.0 °C** with mean relative humidity **89.7 %** max and **64.7 %** min was recorded in the past four days & average wind speed was **3.5 – 4.6 km/ hr.**

Weather forecast for next five days of Imphal West (25th to 29th August, 2018)

Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. **29-32 °C** & minimum temp. **22-23 °C**. Relative humidity may reach upto **100 %** (max RH) & **81 %** (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	Panicle Initiation		- Maintain water level of 5-8cm. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder	Spray Thiomethoxam @ 5 gm/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
Soybean/ Groundnut	Flowering to pegging		- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut Rust in soybean	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Flowering to fruiting		- Hand weeding should be done if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Land preparation to sowing		Field preparation for sowing French bean for both dwarf and pole type must be completed by the end of August for sowing. However, water logged areas and too much wet soil should be avoided. Raised beds are preferred.
Brinjal	Fruiting to harvesting		For fruit and shoot borer of brinjal, harvest mature ones and <i>Decis (Deltamethrin 12 %)</i> @ 7ml /15 lit of water may be sprayed.
Kiwi fruit			- If the vine is infected by collar rot disease, spray copper fungicide or Redomil @ 2.5g/ lit of water and soil drenching with 1% Bordeaux mixture.
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.



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



King Chilli	Fruiting to harvesting	Fruit rot	- It can be controlled by using a combination of biocontrol agents, <i>Trichoderma viride</i> and <i>Pseudomonas fluorescens</i> or spray Bavistin (0.1%).
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.
Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.

Animal Sciences

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

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Management	• Do not allow to consume muddy water to protect from <i>E.coli</i> infection. Use water sanitizer.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(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****24th August, 2018**Senapati

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 25th to 29th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 23rd August, 2018)

Observed **3.6 mm** rainfall with **mainly cloudy sky** but **partly cloudy** during morning hours of 21st Aug. Maximum temperature recorded ranged from **29.9** to **31.6 °C** and minimum of **21.2** to **23.0 °C** with mean relative humidity **89.7 %** max and **64.7 %** min was recorded in the past four days & average wind speed was **3.5 – 4.6 km/ hr.**

Weather forecast for next five days of Senapati (25th to 29th August, 2018)

Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. **28-30 °C** & minimum temp. **20-21 °C**. Relative humidity may reach upto **100 %** (max RH) & **87 %** (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	Panicle Initiation		- Maintain water level of 5-8cm. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder	Spray Thiomethoxam @ 5 gm/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
Soybean/ Groundnut	Flowering to pegging		- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Flowering to fruiting		- Hand weeding should be done if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Land preparation to sowing		Field preparation for sowing French bean for both dwarf and pole type must be completed by the end of August for sowing. However, water logged areas and too much wet soil should be avoided. Raised beds are preferred.
Brinjal	Fruiting to harvesting		For fruit and shoot borer of brinjal, harvest mature ones and <i>Decis (Deltamethrin 12 %)</i> @ 7ml /15 lit of water may be sprayed.
Kiwi fruit			- If the vine is infected by collar rot disease, spray copper fungicide or Redomil @ 2.5g/ lit of water and soil drenching with 1% Bordeaux mixture.
Cauliflower	nursery of main crop	Whiptail	- Raise main crop cauliflower nursery.
King Chilli	Fruiting to harvesting	Fruit rot	- It can be controlled by using a combination of biocontrol agents, <i>Trichoderma viride</i> and <i>Pseudomonas fluorescens</i> or spray Bavistin (0.1%).
Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.



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



Animal Sciences			
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.			
Name of bird/animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Management	• Do not allow to consume muddy water to protect from <i>E.coli</i> infection. Use water sanitizer.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(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****24th August, 2018****Tamenglong**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 25th to 29th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 23rd August, 2018)

Observed **3.6 mm** rainfall with **mainly cloudy sky** but **partly cloudy** during morning hours of 21st Aug. Maximum temperature recorded ranged from **29.9** to **31.6 °C** and minimum of **21.2** to **23.0 °C** with mean relative humidity **89.7 %** max and **64.7 %** min was recorded in the past four days & average wind speed was **3.5 – 4.6 km/ hr.**

Weather forecast for next five days of Tamenglong (25th to 29th August, 2018)

Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. **28-30 °C** & minimum temp. **20-21 °C**. Relative humidity may reach upto **100 %** (max RH) & **86 %** (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	Panicle Initiation		- Maintain water level of 5-8cm. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder	Spray Thiomethoxam @ 5 gm/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
Soybean/ Groundnut	Flowering to pegging		- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
		Rust in soybean	- Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Flowering to fruiting		- Hand weeding should be done if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Land preparation to sowing		Field preparation for sowing French bean for both dwarf and pole type must be completed by the end of August for sowing. However, water logged areas and too much wet soil should be avoided. Raised beds are preferred.
Brinjal	Fruiting to harvesting		For fruit and shoot borer of brinjal, harvest mature ones and <i>Decis (Deltamethrin 12 %)</i> @ 7ml /15 lit of water may be sprayed.
Kiwi fruit			- If the vine is infected by collar rot disease, spray copper fungicide or Redomil @ 2.5g/ lit of water and soil drenching with 1% Bordeaux mixture.
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.



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



King Chilli	Fruiting to harvesting	Fruit rot	- It can be controlled by using a combination of biocontrol agents, <i>Trichoderma viride</i> and <i>Pseudomonas fluorescens</i> or spray Bavistin (0.1%).
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.
Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.

Animal Sciences

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

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Management	• Do not allow to consume muddy water to protect from <i>E.coli</i> infection. Use water sanitizer.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(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****24th August, 2018****Thoubal**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 25th to 29th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 23rd August, 2018)

Observed **3.6 mm** rainfall with **mainly cloudy sky** but **partly cloudy** during morning hours of 21st Aug. Maximum temperature recorded ranged from **29.9** to **31.6 °C** and minimum of **21.2** to **23.0 °C** with mean relative humidity **89.7 %** max and **64.7 %** min was recorded in the past four days & average wind speed was **3.5 – 4.6 km/ hr.**

Weather forecast for next five days of Thoubal (25th to 29th August, 2018)

Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. **29-32 °C** & minimum temp. **22-23 °C**. Relative humidity may reach upto **100 %** (max RH) & **98 %** (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	Panicle Initiation		- Maintain water level of 5-8cm. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder	Spray Thiomethoxam @ 5 gm/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
Soybean/ Groundnut	Flowering to pegging		- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut Rust in soybean	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Flowering to fruiting		- Hand weeding should be done if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Land preparation to sowing		Field preparation for sowing French bean for both dwarf and pole type must be completed by the end of August for sowing. However, water logged areas and too much wet soil should be avoided. Raised beds are preferred.
Brinjal	Fruiting to harvesting		For fruit and shoot borer of brinjal, harvest mature ones and <i>Decis (Deltamethrin 12 %)</i> @ 7ml /15 lit of water may be sprayed.
Kiwi fruit			- If the vine is infected by collar rot disease, spray copper fungicide or Redomil @ 2.5g/ lit of water and soil drenching with 1% Bordeaux mixture.
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.



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



King Chilli	Fruiting to harvesting	Fruit rot	- It can be controlled by using a combination of biocontrol agents, <i>Trichoderma viride</i> and <i>Pseudomonas fluorescens</i> or spray Bavistin (0.1%).
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.
Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.

Animal Sciences

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

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Management	• Do not allow to consume muddy water to protect from <i>E.coli</i> infection. Use water sanitizer.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(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****24th August, 2018****Ukhrul**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 25th to 29th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 23rd August, 2018)

Observed **3.6 mm** rainfall with **mainly cloudy sky** but **partly cloudy** during morning hours of 21st Aug. Maximum temperature recorded ranged from **29.9** to **31.6 °C** and minimum of **21.2** to **23.0 °C** with mean relative humidity **89.7 %** max and **64.7 %** min was recorded in the past four days & average wind speed was **3.5 – 4.6 km/ hr.**

Weather forecast for next five days of Ukhrul (25th to 29th August, 2018)

Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. **28-30 °C** & minimum temp. **20-21 °C**. Relative humidity may reach upto **100 %** (max RH) & **85 %** (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	Panicle Initiation		- Maintain water level of 5-8cm. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder	Spray Thiomethoxam @ 5 gm/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
Soybean/ Groundnut	Flowering to pegging		- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut Rust in soybean	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Flowering to fruiting		- Hand weeding should be done if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Land preparation to sowing		Field preparation for sowing French bean for both dwarf and pole type must be completed by the end of August for sowing. However, water logged areas and too much wet soil should be avoided. Raised beds are preferred.
Brinjal	Fruiting to harvesting		For fruit and shoot borer of brinjal, harvest mature ones and <i>Decis (Deltamethrin 12 %)</i> @ 7ml /15 lit of water may be sprayed.
Kiwi fruit			- If the vine is infected by collar rot disease, spray copper fungicide or Redomil @ 2.5g/ lit of water and soil drenching with 1% Bordeaux mixture.
Cauliflower	nursery of main crop	Whiptail	- Raise main crop cauliflower nursery.
King Chilli	Fruiting to harvesting	Fruit rot	- It can be controlled by using a combination of biocontrol agents, <i>Trichoderma viride</i> and <i>Pseudomonas fluorescens</i> or spray Bavistin (0.1%).
Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.



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



Animal Sciences			
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.			
Name of bird/animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Management	• Do not allow to consume muddy water to protect from E.coli infection. Use water sanitizer.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(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****24th August, 2018****Bishnupur**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 25th to 29th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 23rd August, 2018)

Observed **3.6 mm** rainfall with **mainly cloudy sky** but **partly cloudy** during morning hours of 21st Aug. Maximum temperature recorded ranged from **29.9** to **31.6 °C** and minimum of **21.2** to **23.0 °C** with mean relative humidity **89.7 %** max and **64.7 %** min was recorded in the past four days & average wind speed was **3.5 – 4.6 km/ hr.**

Weather forecast for next five days of Bishnupur (25th to 29th August, 2018)

Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. **29-32 °C** & minimum temp. **22-23 °C**. Relative humidity may reach upto **100 %** (max RH) & **93 %** (min RH). The average wind speed may be **0-4 km/hr.**

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Panicle Initiation		- Maintain water level of 5-8cm. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder	Spray Thiomethoxam @ 5 gm/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
Soybean/ Groundnut	Flowering to pegging		- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut Rust in soybean	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Flowering to fruiting		- Hand weeding should be done if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Land preparation to sowing		Field preparation for sowing French bean for both dwarf and pole type must be completed by the end of August for sowing. However, water logged areas and too much wet soil should be avoided. Raised beds are preferred.
Brinjal	Fruiting to harvesting		For fruit and shoot borer of brinjal, harvest mature ones and <i>Decis (Deltamethrin 12 %)</i> @ 7ml /15 lit of water may be sprayed.
Kiwi fruit			- If the vine is infected by collar rot disease, spray copper fungicide or Redomil @ 2.5g/ lit of water and soil drenching with 1% Bordeaux mixture.
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.



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



King Chilli	Fruiting to harvesting	Fruit rot	- It can be controlled by using a combination of biocontrol agents, <i>Trichoderma viride</i> and <i>Pseudomonas fluorescens</i> or spray Bavistin (0.1%).
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.
Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.

Animal Sciences

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

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Management	• Do not allow to consume muddy water to protect from <i>E.coli</i> infection. Use water sanitizer.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(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****24th August, 2018**Chandel

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 25th to 29th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 23rd August, 2018)

Observed **3.6 mm** rainfall with **mainly cloudy sky** but **partly cloudy** during morning hours of 21st Aug. Maximum temperature recorded ranged from **29.9** to **31.6 °C** and minimum of **21.2** to **23.0 °C** with mean relative humidity **89.7 %** max and **64.7 %** min was recorded in the past four days & average wind speed was **3.5 – 4.6 km/ hr.**

Weather forecast for next five days of Chandel (25th to 29th August, 2018)

Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. **29-32 °C** & minimum temp. **23-24 °C**. Relative humidity may reach upto **100 %** (max RH) & **92 %** (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	Panicle Initiation		- Maintain water level of 5-8cm. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder	Spray Thiomethoxam @ 5 gm/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
Soybean/ Groundnut	Flowering to pegging		- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut Rust in soybean	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Flowering to fruiting		- Hand weeding should be done if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Land preparation to sowing		Field preparation for sowing French bean for both dwarf and pole type must be completed by the end of August for sowing. However, water logged areas and too much wet soil should be avoided. Raised beds are preferred.
Brinjal	Fruiting to harvesting		For fruit and shoot borer of brinjal, harvest mature ones and <i>Decis (Deltamethrin 12 %)</i> @ 7ml /15 lit of water may be sprayed.
Kiwi fruit			- If the vine is infected by collar rot disease, spray copper fungicide or Redomil @ 2.5g/ lit of water and soil drenching with 1% Bordeaux mixture.
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.



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



King Chilli	Fruiting to harvesting	Fruit rot	- It can be controlled by using a combination of biocontrol agents, <i>Trichoderma viride</i> and <i>Pseudomonas fluorescens</i> or spray Bavistin (0.1%).
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.
Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.

Animal Sciences

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

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Management	• Do not allow to consume muddy water to protect from <i>E.coli</i> infection. Use water sanitizer.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

(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****24th August, 2018****Churachandpur**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 25th to 29th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (21st to 23rd August, 2018)

Observed **3.6 mm** rainfall with **mainly cloudy sky** but **partly cloudy** during morning hours of 21st Aug. Maximum temperature recorded ranged from **29.9** to **31.6 °C** and minimum of **21.2** to **23.0 °C** with mean relative humidity **89.7 %** max and **64.7 %** min was recorded in the past four days & average wind speed was **3.5 – 4.6 km/ hr.**

Weather forecast for next five days of Churachandpur (25th to 29th August, 2018)

Likely to have light rains during next five days and mainly cloudy to overcast sky with maximum temp. **28-30 °C** & minimum temp. **22-23 °C**. Relative humidity may reach upto **100 %** (max RH) & **95 %** (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	Panicle Initiation		- Maintain water level of 5-8cm. - Apply 33 kg Urea/ha at panicle initiation stage after complete removal of water. Irrigate field after 48 hrs of top dressing and maintain water level at 5-8 cm.
		Leaf folder	Spray Thiomethoxam @ 5 gm/ 15 lit of water.
		Case worm, Stem Borer/ Gall midge/Plant Hoppers or Thrips	Spray Coragen 3-5 ml per 15 lit of water at the early stage of infestation.
Soybean/ Groundnut	Flowering to pegging		- Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease in groundnut Rust in soybean	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut. - Prune or stake plants and remove weeds to improve air circulation and use a thick layer of mulch or organic compost to cover the soil. - Apply copper sprays or sulfur powders or bio-fungicide to prevent infection of susceptible plants.
Blackgram/ Rice Bean	Flowering to fruiting		- Hand weeding should be done if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required. For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
French Bean	Land preparation to sowing		Field preparation for sowing French bean for both dwarf and pole type must be completed by the end of August for sowing. However, water logged areas and too much wet soil should be avoided. Raised beds are preferred.
Brinjal	Fruiting to harvesting		For fruit and shoot borer of brinjal, harvest mature ones and <i>Decis (Deltamethrin 12 %)</i> @ 7ml /15 lit of water may be sprayed.
Kiwi fruit			- If the vine is infected by collar rot disease, spray copper fungicide or Redomil @ 2.5g/ lit of water and soil drenching with 1% Bordeaux mixture.
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.



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



King Chilli	Fruiting to harvesting	Fruit rot	- It can be controlled by using a combination of biocontrol agents, <i>Trichoderma viride</i> and <i>Pseudomonas fluorescens</i> or spray Bavistin (0.1%).
Potato	Land preparation		- Select the area with fertile and sandy loam soil. Land preparation for planting potato for early crop and also for production of seed may be started in foothills and upland area.
Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.

Animal Sciences

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

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Management	• Do not allow to consume muddy water to protect from <i>E.coli</i> infection. Use water sanitizer.
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
		• Management	• Protect from thunder showers. Protect from after winds (loo). • Avoid flies by using Basil/ bouquets of Nirgundi or lemon grass by hanging.
Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension @ 60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

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