



**ICAR Research Complex for N.E.H. Region
Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th February, 2014

Chandel

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 8th to 12th February, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th February, 2014)

During the past three days the sky was clear to mainly clear but mainly cloudy to cloudy on 6th Feb. No rainfall was recorded during past three days. Maximum temperature range observed was 21.9 – 24.8 °C, range of minimum temperature observed was 3.5 – 5.2 °C, mean relative humidity observed in morning and afternoon were 80.3 % and 40.0 % respectively. The average wind speed range was 3.8 – 7.2 km/hr.

Weather forecast for next five days of Chandel (8th to 12th February, 2014)

There may be light rain during next five days. Sky may be clear to partly cloudy with maximum temp. of 23.0 - 25.0 °C & minimum temp. 4.0 - 8.0 °C. Relative Humidity may reach a maximum value of 94 % (maximum RH) & 36 % (minimum RH). The average wind speed may be 4-5 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Land Preparation		<ul style="list-style-type: none"> - Prepare 700 m² area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m² at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
Rapeseed/ Mustard	Flowering to Siliqua	Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative to flowering & fruiting		<ul style="list-style-type: none"> - Light irrigation may be given if the soil is dry. - Retain healthy and early pods of selected plants for seeds.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	<ul style="list-style-type: none"> - Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Turmeric	Post Harvesting		<ul style="list-style-type: none"> - Select the site for storing rhizome seeds in pits, preferably upland area free from water logging problem. - Put 20cm thick layer of sand at the base of pit of size 1m x 1m x 1m or 1.5m x 0.75m x 0.75m and spread some dry twigs above sand layer and side walls of pit to avoid direct contact of rhizome with soil. - Treat the rhizome seeds with insecticide/ pesticide to avoid scale insects and rot. Place it in the pit, cover with dry twigs and plaster pit with mud.
Cucurbits	Sowing		- Go for nursery rising in polybags (size: 8cm X 10cm) under polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout.



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Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase. - If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Tomato	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Potato	Tuber formation to maturity		<ul style="list-style-type: none"> - For late sown crops, earthing up operations may be followed covering at least 3 nodes. Also top dress with NPK (1:2:1) @ 5g/ plant. - For seed purpose: <ul style="list-style-type: none"> - Removal off-types and plants showing mottling, mosaic, crinkle, necrosis and leaf rolling may be followed twice during the growing season. Also, remove plants showing symptoms of purple top roll. - Maturity days should be strictly maintained as per variety. - Blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R₂B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
			- Spray B904 @ 2ml/ lit of water in and around the poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 5ml / 15 kg body weight.
		Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally @0.2 cc.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied by Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			For a pregnant sow, administer Sharkoferol Vet @ 20ml twice a day along with Ascagold susp. @ b15-20ml twice daily in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 90ml / 300kg body weight.
		B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.

(I. Meghachandra Singh)
Scientist i/c,
Gramin Krishi Mausam Seva (GKMS)



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th February, 2014

Churachandpur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 8th to 12th February, 14 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th February, 2014)</u></p> <p>During the past three days the sky was clear to mainly clear but mainly cloudy to cloudy on 6th Feb. No rainfall was recorded during past three days. Maximum temperature range observed was 21.9 – 24.8 °C, range of minimum temperature observed was 3.5 – 5.2 °C, mean relative humidity observed in morning and afternoon were 80.3 % and 40.0 % respectively. The average wind speed range was 3.8 – 7.2 km/hr.</p>	<p><u>Weather forecast for next five days of Churachandpur (8th to 12th February, 2014)</u></p> <p>There may be light rain during next five days. Sky may be clear to partly cloudy with maximum temp. of 24.0 - 26.0 °C & minimum temp. 4.0 - 7.0 °C. Relative Humidity may reach a maximum value of 94 % (maximum RH) & 33 % (minimum RH). The average wind speed may be 5-6 km/hr during next five days.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Land Preparation		<ul style="list-style-type: none"> - Prepare 700 m² area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m² at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
Rapeseed/ Mustard	Flowering to Siliqua	Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative to flowering & fruiting		<ul style="list-style-type: none"> - Light irrigation may be given if the soil is dry. - Retain healthy and early pods of selected plants for seeds.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	<ul style="list-style-type: none"> - Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Turmeric	Post Harvesting		<ul style="list-style-type: none"> - Select the site for storing rhizome seeds in pits, preferably upland area free from water logging problem. - Put 20cm thick layer of sand at the base of pit of size 1m x 1m x 1m or 1.5m x 0.75m x 0.75m and spread some dry twigs above sand layer and side walls of pit to avoid direct contact of rhizome with soil. - Treat the rhizome seeds with insecticide/ pesticide to avoid scale insects and rot. Place it in the pit, cover with dry twigs and plaster pit with mud.
Cucurbits	Sowing		- Go for nursery rising in polybags (size: 8cm X 10cm) under polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout.



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Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase. - If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Tomato	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Potato	Tuber formation to maturity		<ul style="list-style-type: none"> - For late sown crops, earthing up operations may be followed covering at least 3 nodes. Also top dress with NPK (1:2:1) @ 5g/ plant. - For seed purpose: <ul style="list-style-type: none"> - Removal off-types and plants showing mottling, mosaic, crinkle, necrosis and leaf rolling may be followed twice during the growing season. Also, remove plants showing symptoms of purple top roll. - Maturity days should be strictly maintained as per variety. - Blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R₂B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
			- Spray B904 @ 2ml/ lit of water in and around the poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 5ml / 15 kg body weight.
		Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally @0.2 cc.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied by Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			For a pregnant sow, administer Sharkoferol Vet @ 20ml twice a day along with Ascagold susp. @ b15-20ml twice daily in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 90ml / 300kg body weight.
		B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.

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MANIPUR BULLETIN

7th February, 2014

Imphal-East

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 8th to 12th February, 14 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th February, 2014)</u></p> <p>During the past three days the sky was clear to mainly clear but mainly cloudy to cloudy on 6th Feb. No rainfall was recorded during past three days. Maximum temperature range observed was 21.9 – 24.8 °C, range of minimum temperature observed was 3.5 – 5.2 °C, mean relative humidity observed in morning and afternoon were 80.3 % and 40.0 % respectively. The average wind speed range was 3.8 – 7.2 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - East (8th to 12th February, 2014)</u></p> <p>There may be light rain during next five days. Sky may be clear to partly cloudy with maximum temp. of 21.0 - 23.0 °C & minimum temp. 3.0 - 6.0 °C. Relative Humidity may reach a maximum value of 99 % (maximum RH) & 35 % (minimum RH). The average wind speed may be 2-3 km/hr during next five days.</p>
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Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Land Preparation		<ul style="list-style-type: none"> - Prepare 700 m² area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m² at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
Rapeseed/ Mustard	Flowering to Siliqua	Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative to flowering & fruiting		<ul style="list-style-type: none"> - Light irrigation may be given if the soil is dry. - Retain healthy and early pods of selected plants for seeds.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	<ul style="list-style-type: none"> - Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Turmeric	Post Harvesting		<ul style="list-style-type: none"> - Select the site for storing rhizome seeds in pits, preferably upland area free from water logging problem. - Put 20cm thick layer of sand at the base of pit of size 1m x 1m x 1m or 1.5m x 0.75m x 0.75m and spread some dry twigs above sand layer and side walls of pit to avoid direct contact of rhizome with soil. - Treat the rhizome seeds with insecticide/ pesticide to avoid scale insects and rot. Place it in the pit, cover with dry twigs and plaster pit with mud.
Cucurbits	Sowing		- Go for nursery rising in polybags (size: 8cm X 10cm) under polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout.



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Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase. - If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Tomato	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Potato	Tuber formation to maturity		<ul style="list-style-type: none"> - For late sown crops, earthing up operations may be followed covering at least 3 nodes. Also top dress with NPK (1:2:1) @ 5g/ plant. - For seed purpose: <ul style="list-style-type: none"> - Removal off-types and plants showing mottling, mosaic, crinkle, necrosis and leaf rolling may be followed twice during the growing season. Also, remove plants showing symptoms of purple top roll. - Maturity days should be strictly maintained as per variety. - Blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R₂B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
			- Spray B904 @ 2ml/ lit of water in and around the poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 5ml / 15 kg body weight.
		Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally @0.2 cc.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied by Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
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		B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
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MANIPUR BULLETIN

7th February, 2014

Imphal-West

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 8th to 12th February, 14 as given below:

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Weather forecast for next five days of Imphal - West (8th to 12th February, 2014)

There may be light rain during next five days. Sky may be clear to partly cloudy with maximum temp. of 23.0 - 24.0 °C & minimum temp. 3.0 - 6.0 °C. Relative Humidity may reach a maximum value of 98 % (maximum RH) & 35 % (minimum RH). The average wind speed may be 2-3 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Land Preparation		<ul style="list-style-type: none"> - Prepare 700 m² area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m² at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
Rapeseed/ Mustard	Flowering to Siliqua	Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative to flowering & fruiting		<ul style="list-style-type: none"> - Light irrigation may be given if the soil is dry. - Retain healthy and early pods of selected plants for seeds.
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Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Turmeric	Post Harvesting		<ul style="list-style-type: none"> - Select the site for storing rhizome seeds in pits, preferably upland area free from water logging problem. - Put 20cm thick layer of sand at the base of pit of size 1m x 1m x 1m or 1.5m x 0.75m x 0.75m and spread some dry twigs above sand layer and side walls of pit to avoid direct contact of rhizome with soil. - Treat the rhizome seeds with insecticide/ pesticide to avoid scale insects and rot. Place it in the pit, cover with dry twigs and plaster pit with mud.
Cucurbits	Sowing		- Go for nursery rising in polybags (size: 8cm X 10cm) under polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout.



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Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase. - If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Tomato	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Potato	Tuber formation to maturity		<ul style="list-style-type: none"> - For late sown crops, earthing up operations may be followed covering at least 3 nodes. Also top dress with NPK (1:2:1) @ 5g/ plant. - For seed purpose: <ul style="list-style-type: none"> - Removal off-types and plants showing mottling, mosaic, crinkle, necrosis and leaf rolling may be followed twice during the growing season. Also, remove plants showing symptoms of purple top roll. - Maturity days should be strictly maintained as per variety. - Blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R₂B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
			- Spray B904 @ 2ml/ lit of water in and around the poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 5ml / 15 kg body weight.
		Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally @0.2 cc.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied by Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			For a pregnant sow, administer Sharkoferol Vet @ 20ml twice a day along with Ascagold susp. @ b15-20ml twice daily in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 90ml / 300kg body weight.
		B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.

(I. Meghachandra Singh)
Scientist i/c,
Gramin Krishi Mausam Seva (GKMS)



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th February, 2014

Senapati

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 8th to 12th February, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th February, 2014)

During the past three days the sky was clear to mainly clear but mainly cloudy to cloudy on 6th Feb. No rainfall was recorded during past three days. Maximum temperature range observed was 21.9 – 24.8 °C, range of minimum temperature observed was 3.5 – 5.2 °C, mean relative humidity observed in morning and afternoon were 80.3 % and 40.0 % respectively. The average wind speed range was 3.8 – 7.2 km/hr.

Weather forecast for next five days of Senapati (8th to 12th February, 2014)

There may be light rain during next five days. Sky may be clear to partly cloudy with maximum temp. of 21.0 - 23.0 °C & minimum temp. 1.0 - 4.0 °C. Relative Humidity may reach a maximum value of 97 % (maximum RH) & 36 % (minimum RH). The average wind speed may be 2-3 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Land Preparation		<ul style="list-style-type: none"> - Prepare 700 m² area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m² at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
Rapeseed/ Mustard	Flowering to Siliqua	Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative to flowering & fruiting		<ul style="list-style-type: none"> - Light irrigation may be given if the soil is dry. - Retain healthy and early pods of selected plants for seeds.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	<ul style="list-style-type: none"> - Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Turmeric	Post Harvesting		<ul style="list-style-type: none"> - Select the site for storing rhizome seeds in pits, preferably upland area free from water logging problem. - Put 20cm thick layer of sand at the base of pit of size 1m x 1m x 1m or 1.5m x 0.75m x 0.75m and spread some dry twigs above sand layer and side walls of pit to avoid direct contact of rhizome with soil. - Treat the rhizome seeds with insecticide/ pesticide to avoid scale insects and rot. Place it in the pit, cover with dry twigs and plaster pit with mud.
Cucurbits	Sowing		- Go for nursery rising in polybags (size: 8cm X 10cm) under polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout.



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Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase. - If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Tomato	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R ₂ B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
			- Spray B904 @ 2ml/ lit of water in and around the poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 5ml / 15 kg body weight.
		Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally @0.2 cc.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied by Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			For a pregnant sow, administer Sharkoferol Vet @ 20ml twice a day along with Ascagold susp. @ b15-20ml twice daily in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 90ml / 300kg body weight.
		B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.

(I. Meghachandra Singh)
Scientist i/c,
Gramin Krishi Mausam Seva (GKMS)



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Manipur Centre, Lamphelpat, Imphal - 795 004**



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th February, 2014

Tamenglong

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 8th to 12th February, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th February, 2014)

During the past three days the sky was clear to mainly clear but mainly cloudy to cloudy on 6th Feb. No rainfall was recorded during past three days. Maximum temperature range observed was 21.9 – 24.8 °C, range of minimum temperature observed was 3.5 – 5.2 °C, mean relative humidity observed in morning and afternoon were 80.3 % and 40.0 % respectively. The average wind speed range was 3.8 – 7.2 km/hr.

Weather forecast for next five days of Tamenglong (8th to 12th February, 2014)

There may be light rain during next five days. Sky may be clear to partly cloudy with maximum temp. of 23.0 - 24.0 °C & minimum temp. 3.0 - 6.0 °C. Relative Humidity may reach a maximum value of 96 % (maximum RH) & 35 % (minimum RH). The average wind speed may be 3 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Land Preparation		<ul style="list-style-type: none"> - Prepare 700 m² area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m² at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
Rapeseed/ Mustard	Flowering to Siliqua	Pod borer	- Spray Imidachlopid @ 0.25 ml/ litre of water to the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative to flowering & fruiting		<ul style="list-style-type: none"> - Light irrigation may be given if the soil is dry. - Retain healthy and early pods of selected plants for seeds.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	<ul style="list-style-type: none"> - Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Turmeric	Post Harvesting		<ul style="list-style-type: none"> - Select the site for storing rhizome seeds in pits, preferably upland area free from water logging problem. - Put 20cm thick layer of sand at the base of pit of size 1m x 1m x 1m or 1.5m x 0.75m x 0.75m and spread some dry twigs above sand layer and side walls of pit to avoid direct contact of rhizome with soil. - Treat the rhizome seeds with insecticide/ pesticide to avoid scale insects and rot. Place it in the pit, cover with dry twigs and plaster pit with mud.
Cucurbits	Sowing		- Go for nursery rising in polybags (size: 8cm X 10cm) under polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout.



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Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase. - If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Tomato	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Potato	Tuber formation to maturity		<ul style="list-style-type: none"> - For late sown crops, earthing up operations may be followed covering at least 3 nodes. Also top dress with NPK (1:2:1) @ 5g/ plant. - For seed purpose: <ul style="list-style-type: none"> - Removal off-types and plants showing mottling, mosaic, crinkle, necrosis and leaf rolling may be followed twice during the growing season. Also, remove plants showing symptoms of purple top roll. - Maturity days should be strictly maintained as per variety. - Blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R₂B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
			- Spray B904 @ 2ml/ lit of water in and around the poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 5ml / 15 kg body weight.
		Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally @0.2 cc.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied by Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			For a pregnant sow, administer Sharkoferol Vet @ 20ml twice a day along with Ascagold susp. @ b15-20ml twice daily in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 90ml / 300kg body weight.
		B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.

(I. Meghachandra Singh)
Scientist i/c,
Gramin Krishi Mausam Seva (GKMS)



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th February, 2014

Ukhrul

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 8th to 12th February, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th February, 2014)

During the past three days the sky was clear to mainly clear but mainly cloudy to cloudy on 6th Feb. No rainfall was recorded during past three days. Maximum temperature range observed was 21.9 – 24.8 °C, range of minimum temperature observed was 3.5 – 5.2 °C, mean relative humidity observed in morning and afternoon were 80.3 % and 40.0 % respectively. The average wind speed range was 3.8 – 7.2 km/hr.

Weather forecast for next five days of Ukhrul (8th to 12th February, 2014)

There may be light rain during next five days. Sky may be clear to partly cloudy with maximum temp. of 21.0 - 23.0 °C & minimum temp. 2.0 - 4.0 °C. Relative Humidity may reach a maximum value of 91 % (maximum RH) & 37 % (minimum RH). The average wind speed may be 4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Land Preparation		<ul style="list-style-type: none"> - Prepare 700 m² area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m² at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
Rapeseed/ Mustard	Flowering to Siliqua	Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative to flowering & fruiting		<ul style="list-style-type: none"> - Light irrigation may be given if the soil is dry. - Retain healthy and early pods of selected plants for seeds.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	<ul style="list-style-type: none"> - Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Turmeric	Post Harvesting		<ul style="list-style-type: none"> - Select the site for storing rhizome seeds in pits, preferably upland area free from water logging problem. - Put 20cm thick layer of sand at the base of pit of size 1m x 1m x 1m or 1.5m x 0.75m x 0.75m and spread some dry twigs above sand layer and side walls of pit to avoid direct contact of rhizome with soil. - Treat the rhizome seeds with insecticide/ pesticide to avoid scale insects and rot. Place it in the pit, cover with dry twigs and plaster pit with mud.
Cucurbits	Sowing		- Go for nursery rising in polybags (size: 8cm X 10cm) under polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout.



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Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase. - If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Tomato	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R ₂ B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
			- Spray B904 @ 2ml/ lit of water in and around the poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 5ml / 15 kg body weight.
		Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally @0.2 cc.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied by Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			For a pregnant sow, administer Sharkoferol Vet @ 20ml twice a day along with Ascagold susp. @ b15-20ml twice daily in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 90ml / 300kg body weight.
		B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.

(I. Meghachandra Singh)
Scientist i/c,
Gramin Krishi Mausam Seva (GKMS)



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

7th February, 2014

Thoubal

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 8th to 12th February, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th February, 2014)

During the past three days the sky was clear to mainly clear but mainly cloudy to cloudy on 6th Feb. No rainfall was recorded during past three days. Maximum temperature range observed was 21.9 – 24.8 °C, range of minimum temperature observed was 3.5 – 5.2 °C, mean relative humidity observed in morning and afternoon were 80.3 % and 40.0 % respectively. The average wind speed range was 3.8 – 7.2 km/hr.

Weather forecast for next five days of Thoubal (8th to 12th February, 2014)

There may be light rain during next five days. Sky may be clear to partly cloudy with maximum temp. of 23.0 - 25.0 °C & minimum temp. 4.0 - 8.0 °C. Relative Humidity may reach a maximum value of 98 % (maximum RH) & 35 % (minimum RH). The average wind speed may be 4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Land Preparation		<ul style="list-style-type: none"> - Prepare 700 m² area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m² at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
Rapeseed/ Mustard	Flowering to Siliqua	Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative to flowering & fruiting		<ul style="list-style-type: none"> - Light irrigation may be given if the soil is dry. - Retain healthy and early pods of selected plants for seeds.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	<ul style="list-style-type: none"> - Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Turmeric	Post Harvesting		<ul style="list-style-type: none"> - Select the site for storing rhizome seeds in pits, preferably upland area free from water logging problem. - Put 20cm thick layer of sand at the base of pit of size 1m x 1m x 1m or 1.5m x 0.75m x 0.75m and spread some dry twigs above sand layer and side walls of pit to avoid direct contact of rhizome with soil. - Treat the rhizome seeds with insecticide/ pesticide to avoid scale insects and rot. Place it in the pit, cover with dry twigs and plaster pit with mud.
Cucurbits	Sowing		- Go for nursery rising in polybags (size: 8cm X 10cm) under polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout.



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“Integrated Agromet Advisory Services”

Onion/ Garlic	Vegetative		<ul style="list-style-type: none"> - Light and frequent irrigation is required to keep the soil moist throughout the growing period/ vegetative phase. - If the bulb formation stage has started then it must be checked that the soil is not too dry also care should be taken that the neck portion should be above the ground level.
Tomato	Sowing		<ul style="list-style-type: none"> - Tomato nurseries should be raised under low cost polyhouse. - Nursery bed of 0.75m x 4m may be prepared and mix Carbendazim @ 5g/ 3m² area, keep the bed covered with gunny bag for at least 24 hrs. - Sow seeds @ 10g/ 3m² area keep the bed covered with gunny bag.
Potato	Tuber formation to maturity		<ul style="list-style-type: none"> - For late sown crops, earthing up operations may be followed covering at least 3 nodes. Also top dress with NPK (1:2:1) @ 5g/ plant. - For seed purpose: <ul style="list-style-type: none"> - Removal off-types and plants showing mottling, mosaic, crinkle, necrosis and leaf rolling may be followed twice during the growing season. Also, remove plants showing symptoms of purple top roll. - Maturity days should be strictly maintained as per variety. - Blight and leaf spot disease must be controlled by spraying Mancozeb @ 0.2% alternatively with Copper Oxichloride @ 0.3% or with Sixer.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Poultry	All susceptible age groups (as and when required)	Ranikhet disease	<ol style="list-style-type: none"> 1. F-1 Strain first dose within 7 days of age and second dose may be given at 30days for all birds (eye drop/ ocular). 2. R₂B vaccine to 8-9 weeks of age group birds (layers) (intra-muscularly @ 0.2 cc/ bird). 3. Killed ND virus vaccine of 16-18 weeks of age group birds (layers) (intra-muscularly).
		Deworming	Deworming may be done using Piperazine Citrate @ 50 ml in drinking water for 100 birds.
		Gumboro	- Gumboro disease vaccine (@ 1drop/ bird in eye) when the bird is 14 days old.
			- Spray B904 @ 2ml/ lit of water in and around the poultry shed.
Sheep/ Goat	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 5ml / 15 kg body weight.
		Contagious Caprine Pluero-pneumonia (CCPP) in goat	- Vaccinate against Contagious Caprine Pluero-pneumonia intra- dermally @0.2 cc.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40kg b.wt. accompanied by Livoferol @ 20ml daily.
Pig	Above 3 months of age (as and when required)	Swine Fever & FMD	- Vaccinate against swine fever & FMD after the age of 3 months.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
		Endoparasite	- Administer Minthal bolus @ 1 bolus/ 40 kg b.wt. accompanied by Livozyme @ 10 ml twice daily.
			For a pregnant sow, administer Sharkoferol Vet @ 20ml twice a day along with Ascagold susp. @ b15-20ml twice daily in feed.
Cattle / Buffalo/ Mithun	Above 3 months of age (as and when required)	Fascioliosis	- Administer Tolzan-F orally once @ 90ml / 300kg body weight.
		B.Q. & H.S.	- Vaccinate against B.Q. & H.S.
		Skin disease	- Spray Butox @ 2ml in 1 lit of water, twice a week.

(I. Meghachandra Singh)
Scientist i/c,
Gramin Krishi Mausam Seva (GKMS)



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MANIPUR BULLETIN

7th February, 2014

Bishnupur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 8th to 12th February, 14 as given below:

Significant past weather for the preceding bi-weekly of Imphal - West (4th to 6th February, 2014)

During the past three days the sky was clear to mainly clear but mainly cloudy to cloudy on 6th Feb. No rainfall was recorded during past three days. Maximum temperature range observed was 21.9 – 24.8 °C, range of minimum temperature observed was 3.5 – 5.2 °C, mean relative humidity observed in morning and afternoon were 80.3 % and 40.0 % respectively. The average wind speed range was 3.8 – 7.2 km/hr.

Weather forecast for next five days of Bishnupur (8th to 12th February, 2014)

There may be light rain during next five days. Sky may be clear to partly cloudy with maximum temp. of 24.0 - 25.0 °C & minimum temp. 6.0 - 8.0 °C. Relative Humidity may reach a maximum value of 95 % (maximum RH) & 34 % (minimum RH). The average wind speed may be 4 km/hr during next five days.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre-kharif Rice	Land Preparation		<ul style="list-style-type: none"> - Prepare 700 m² area for raising pre-kharif rice nursery for transplanting in 1 ha land. Apply well decomposed FYM/ compost @ 1 t/ 700 m² at final leveling. - Nursery bed should be well puddled and leveled to avoid uneven stagnation of water.
Rapeseed/ Mustard	Flowering to Siliqua	Pod borer	- Spray Imidachloprid @ 0.25 ml/ litre of water to the infected patches.
		Hairy caterpillar	- Spray Quinalphos or Chloropyriphos @ 2ml/litre of water to the infected patches only.
Pulses (Pea & Lentil)	Vegetative to flowering & fruiting		<ul style="list-style-type: none"> - Light irrigation may be given if the soil is dry. - Retain healthy and early pods of selected plants for seeds.
		Powdery Mildew	- Spray Bayleton (Triaclemofon 25% WP) @ 7.5 g/ pump or Dinocap (Karathane 46% EC) @ 7.5ml/ pump.
		Aphid	<ul style="list-style-type: none"> - Spray Cypermethrin @2ml/lit of water or Nuvan @ 0.5ml/ lit of water against aphid. - For organic control against aphid, sprays that consist of azadirachtin, neem oil or pyrethrin may be used.
Rabi Maize	Vegetative		<ul style="list-style-type: none"> - Earthing-up of rabi maize sown intercropped with pea or potato may be done and apply irrigation at an interval of 10-15 days to maintain moisture status. - When the plant is knee high apply fertilizer @ 25 kg N/ha at the time of inter-culture operation.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth. Well ventilated rooms must be used for storage of grains/ seeds.
Horticulture Crops			
Turmeric	Post Harvesting		<ul style="list-style-type: none"> - Select the site for storing rhizome seeds in pits, preferably upland area free from water logging problem. - Put 20cm thick layer of sand at the base of pit of size 1m x 1m x 1m or 1.5m x 0.75m x 0.75m and spread some dry twigs above sand layer and side walls of pit to avoid direct contact of rhizome with soil. - Treat the rhizome seeds with insecticide/ pesticide to avoid scale insects and rot. Place it in the pit, cover with dry twigs and plaster pit with mud.
Cucurbits	Sowing		- Go for nursery rising in polybags (size: 8cm X 10cm) under polyhouse. In the 50 kg mixture of garden soil, sand and FYM in the ratio 2:1:1 incorporate 2gm Captan 50W.P. One seed is sown per polybag and kept covered with polythene sheet till the seeds sprout.



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Animal Sciences

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