



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

16th April, 2013

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 17th to 21st April, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (12th to 15th April, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 12th and morning hours of 14th April. 3.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 22.9 – 31.1 °C, range of minimum temperature observed was 14.5 – 20.4 °C, mean relative humidity observed in morning and afternoon were 78.75 % and 53.25 % respectively. The average wind speed range was 3.7 – 10.0 km/hr.</p>	<p><u>Weather forecast for next five days of Bishnupur (17th to 21st April, 2013)</u></p> <p>There is likely to have light to moderate rain with thunder-squall during next three days. The sky is likely to be mainly cloudy. The maximum temp. is likely to be 22.0 - 30.0 °C. The minimum temp. is likely to be 15.0 – 16.0 °C. The maximum RH is likely to attain a max value of 100 %. Minimum RH is likely to reach a max of 81 %. The average wind speed during next five days may reach upto max. value of 2 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 19th April, 2013)

Rain/thundershowers would occur at a few places over northeastern states

Weather Warning during next 3 days

Thunderstorm accompanied with thundersquall may occur at one or two places over Manipur during next 48hrs

Weather Outlook for subsequent 4 days from 19th to 23rd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Nursery to transplanting and early vegetative		<ul style="list-style-type: none"> - Apply 88kg of DAP, 38 kg Urea and 32 kg MOP per hectare as basal dose at final ploughing. - Within two days of uprooting, 30-40 days old seedlings should be transplanted with 2-3 seedlings per hill for normal transplanting (spacing: 20 x 10 cm). For late transplanting (with older seedlings), plant 3-4 seedlings per hill for using marked/ beaded ropes. - Maintain a thin film of water of depth 3-5cm of water at transplanting stage.
Maize	Vegetative to flowering and sowing	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding should be done. - Provide wind breaks using bamboo and paddy straw to reduce losses due to thunderstorm. - sowing in lowland area can be done. Also, late sowing in upland area may be done.
Groundnut & soybean	Land preparation		Land preparation may be started.
Storage			- Clean and dry the seeds and store in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Citrus	All age	Leaf Miner	Insectides like Dichlorovos @ 0.5ml/lit of water or Cypermethrin @ 1ml/lit of water may be sprayed.
Bhindi	Land preparation to sowing		Land preparation as well as sowing in prepared beds may be done.



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“Integrated Agromet Advisory Services”

Alocassia	Planting		Alocassia planting may be done in upland and sunny area with fertile soil. Avoid area where there is water logging problem.
Cucurbits	Flowering to fruiting		Top dressing with 20gm DAP + 3gm MOP per plant will enhance fruiting. Provide proper support system for trailing types.
Tomato	Flowering to fruiting		- When the plants are 40-50 days old (in flowering stage) prophylactic measures against pod borer and early blight may be taken up after next three days ,i.e., after rains. Sprays must be given at least twice at 7-10 days interval.
Onion	Harvesting to post-harvesting		As there is rain during next three days, harvest onion. After harvesting spread in airy shed for 4-5 days and cut the leaves & roots. Then sorting may be done.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination.
Goat	All susceptible age groups	De-worming against nematodes	- Tolzan-F @ 90ml/300 kg b.wt. once only.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i> but deworm with before vaccination.
		<i>Coccidiosis</i>	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days - Provide clean & safe water by adding Sukrena (scnitzer) to avoid colebacilliosis.

Fisheries

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Ensure clean water free from algal blooms and pollution and maintain depth of 1.5 - 2.0 m. Apply lime regularly @ 25kg/ha in a month.
		Feed	Balanced feed containing vitamins and mineral mixtures @ 5% body weight should be provided in 3 splits in a day.
		Health	Spray CIFAX to protect brooders from diseases.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.7ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	Water depth should be maintained at 1.0 m. After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

I. Meghachandra Singh
Scientist i/c, IAAS



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“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

16th April, 2013

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 17th to 21st April, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (12th to 15th April, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 12th and morning hours of 14th April. 3.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 22.9 – 31.1 °C, range of minimum temperature observed was 14.5 – 20.4 °C, mean relative humidity observed in morning and afternoon were 78.75 % and 53.25 % respectively. The average wind speed range was 3.7 – 10.0 km/hr.</p>	<p><u>Weather forecast for next five days of Chandel (17th to 21st April, 2013)</u></p> <p>There is likely to have light to moderate rain with thunder-squall during next three days. The sky is likely to be mainly cloudy. The maximum temp. is likely to be 27.0 - 33.0 °C. The minimum temp. is likely to be 17.0 – 20.0 °C. The maximum RH is likely to attain a max value of 80 %. Minimum RH is likely to reach a max of 51 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 19th April, 2013)

Rain/thundershowers would occur at a few places over northeastern states

Weather Warning during next 3 days

Thunderstorm accompanied with thundersquall may occur at one or two places over Manipur during next 48hrs

Weather Outlook for subsequent 4 days from 19th to 23rd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Nursery to transplanting and early vegetative		<ul style="list-style-type: none"> - Apply 88kg of DAP, 38 kg Urea and 32 kg MOP per hectare as basal dose at final ploughing. - Within two days of uprooting, 30-40 days old seedlings should be transplanted with 2-3 seedlings per hill for normal transplanting (spacing: 20 x 10 cm). For late transplanting (with older seedlings), plant 3-4 seedlings per hill for using marked/ beaded ropes. - Maintain a thin film of water of depth 3-5cm of water at transplanting stage.
Maize	Vegetative to flowering and sowing	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding should be done. - Provide wind breaks using bamboo and paddy straw to reduce losses due to thunderstorm. - sowing in lowland area can be done. Also, late sowing in upland area may be done.
Groundnut & soybean	Land preparation		Land preparation may be started.
Storage			- Clean and dry the seeds and store in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Citrus	All age	Leaf Miner	Insectides like Dichlorovos @ 0.5ml/lit of water or Cypermethrin@ 1ml/lit of water may be sprayed.
Bhindi	Land preparation to sowing		Land preparation as well as sowing in prepared beds may be done.



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Alocassia	Planting		Alocassia planting may be done in upland and sunny area with fertile soil. Avoid area where there is water logging problem.
Cucurbits	Flowering to fruiting		Top dressing with 20gm DAP + 3gm MOP per plant will enhance fruiting. Provide proper support system for trailing types.
Tomato	Flowering to fruiting		- When the plants are 40-50 days old (in flowering stage) prophylactic measures against pod borer and early blight may be taken up after next three days ,i.e., after rains. Sprays must be given at least twice at 7-10 days interval.
Onion	Harvesting to post-harvesting		As there is rain during next three days, harvest onion. After harvesting spread in airy shed for 4-5 days and cut the leaves & roots. Then sorting may be done.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination.
Goat	All susceptible age groups	De-worming against nematodes	- Tolzan-F @ 90ml/300 kg b.wt. once only.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease but deworm with before vaccination.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days - Provide clean & safe water by adding Sukrena (scnitzer) to avoid colebacilliosis.

Fisheries

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Ensure clean water free from algal blooms and pollution and maintain depth of 1.5 - 2.0 m. Apply lime regularly @ 25kg/ha in a month.
		Feed	Balanced feed containing vitamins and mineral mixtures @ 5% body weight should be provided in 3 splits in a day.
		Health	Spray CIFAX to protect brooders from diseases.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.7ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	Water depth should be maintained at 1.0 m. After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

I. Meghachandra Singh
Scientist i/c, IAAS



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MANIPUR BULLETIN

16th April, 2013

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 17th to 21st April, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (12th to 15th April, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 12th and morning hours of 14th April. 3.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 22.9 – 31.1 °C, range of minimum temperature observed was 14.5 – 20.4 °C, mean relative humidity observed in morning and afternoon were 78.75 % and 53.25 % respectively. The average wind speed range was 3.7 – 10.0 km/hr.</p>	<p><u>Weather forecast for next five days of Churachandpur (17th to 21st April, 2013)</u></p> <p>There is likely to have light to moderate rain with thunder-squall during next three days. The sky is likely to be mainly cloudy. The maximum temp. is likely to be 23.0 - 30.0 °C. The minimum temp. is likely to be 15.0 – 17.0 °C. The maximum RH is likely to attain a max value of 95 %. Minimum RH is likely to reach a max of 93 %. The average wind speed during next five days may reach upto max. value of 6 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 19th April, 2013)

Rain/thundershowers would occur at a few places over northeastern states

Weather Warning during next 3 days

Thunderstorm accompanied with thundersquall may occur at one or two places over Manipur during next 48hrs

Weather Outlook for subsequent 4 days from 19th to 23rd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Nursery to transplanting and early vegetative		<ul style="list-style-type: none"> - Apply 88kg of DAP, 38 kg Urea and 32 kg MOP per hectare as basal dose at final ploughing. - Within two days of uprooting, 30-40 days old seedlings should be transplanted with 2-3 seedlings per hill for normal transplanting (spacing: 20 x 10 cm). For late transplanting (with older seedlings), plant 3-4 seedlings per hill for using marked/ beaded ropes. - Maintain a thin film of water of depth 3-5cm of water at transplanting stage.
Maize	Vegetative to flowering and sowing	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding should be done. - Provide wind breaks using bamboo and paddy straw to reduce losses due to thunderstorm. - sowing in lowland area can be done. Also, late sowing in upland area may be done.
Groundnut & soybean	Land preparation		Land preparation may be started.
Storage			- Clean and dry the seeds and store in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Citrus	All age	Leaf Miner	Insectides like Dichlorovos @ 0.5ml/lit of water or Cypermethrin@ 1ml/lit of water may be sprayed.
Bhindi	Land preparation to sowing		Land preparation as well as sowing in prepared beds may be done.



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Alocassia	Planting		Alocassia planting may be done in upland and sunny area with fertile soil. Avoid area where there is water logging problem.
Cucurbits	Flowering to fruiting		Top dressing with 20gm DAP + 3gm MOP per plant will enhance fruiting. Provide proper support system for trailing types.
Tomato	Flowering to fruiting		- When the plants are 40-50 days old (in flowering stage) prophylactic measures against pod borer and early blight may be taken up after next three days ,i.e., after rains. Sprays must be given at least twice at 7-10 days interval.
Onion	Harvesting to post-harvesting		As there is rain during next three days, harvest onion. After harvesting spread in airy shed for 4-5 days and cut the leaves & roots. Then sorting may be done.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination.
Goat	All susceptible age groups	De-worming against nematodes	- Tolzan-F @ 90ml/300 kg b.wt. once only.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease but deworm with before vaccination.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days - Provide clean & safe water by adding Sukrena (scnitzer) to avoid colebacilliosis.

Fisheries

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Ensure clean water free from algal blooms and pollution and maintain depth of 1.5 - 2.0 m. Apply lime regularly @ 25kg/ha in a month.
		Feed	Balanced feed containing vitamins and mineral mixtures @ 5% body weight should be provided in 3 splits in a day.
		Health	Spray CIFAX to protect brooders from diseases.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.7ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	Water depth should be maintained at 1.0 m. After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

I. Meghachandra Singh
Scientist i/c, IAAS



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MANIPUR BULLETIN

16th April, 2013

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 17th to 21st April, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (12th to 15th April, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 12th and morning hours of 14th April. 3.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 22.9 – 31.1 °C, range of minimum temperature observed was 14.5 – 20.4 °C, mean relative humidity observed in morning and afternoon were 78.75 % and 53.25 % respectively. The average wind speed range was 3.7 – 10.0 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - East (17th to 21st April, 2013)</u></p> <p>There is likely to have light to moderate rain with thunder-squall during next three days. The sky is likely to be mainly cloudy. The maximum temp. is likely to be 23.0 - 30.0 °C. The minimum temp. is likely to be 15.0 – 16.0 °C. The maximum RH is likely to attain a max value of 90 %. Minimum RH is likely to reach a max of 73 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 19th April, 2013)

Rain/thundershowers would occur at a few places over northeastern states

Weather Warning during next 3 days

Thunderstorm accompanied with thundersquall may occur at one or two places over Manipur during next 48hrs

Weather Outlook for subsequent 4 days from 19th to 23rd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Nursery to transplanting and early vegetative		<ul style="list-style-type: none"> - Apply 88kg of DAP, 38 kg Urea and 32 kg MOP per hectare as basal dose at final ploughing. - Within two days of uprooting, 30-40 days old seedlings should be transplanted with 2-3 seedlings per hill for normal transplanting (spacing: 20 x 10 cm). For late transplanting (with older seedlings), plant 3-4 seedlings per hill for using marked/ beaded ropes. - Maintain a thin film of water of depth 3-5cm of water at transplanting stage.
Maize	Vegetative to flowering and sowing	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding should be done. - Provide wind breaks using bamboo and paddy straw to reduce losses due to thunderstorm. - sowing in lowland area can be done. Also, late sowing in upland area may be done.
Groundnut & soybean	Land preparation		Land preparation may be started.
Storage			- Clean and dry the seeds and store in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Citrus	All age	Leaf Miner	Insectides like Dichlorovos @ 0.5ml/lit of water or Cypermethrin @ 1ml/lit of water may be sprayed.
Bhindi	Land preparation to sowing		Land preparation as well as sowing in prepared beds may be done.



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Alocassia	Planting		Alocassia planting may be done in upland and sunny area with fertile soil. Avoid area where there is water logging problem.
Cucurbits	Flowering to fruiting		Top dressing with 20gm DAP + 3gm MOP per plant will enhance fruiting. Provide proper support system for trailing types.
Tomato	Flowering to fruiting		- When the plants are 40-50 days old (in flowering stage) prophylactic measures against pod borer and early blight may be taken up after next three days ,i.e., after rains. Sprays must be given at least twice at 7-10 days interval.
Onion	Harvesting to post-harvesting		As there is rain during next three days, harvest onion. After harvesting spread in airy shed for 4-5 days and cut the leaves & roots. Then sorting may be done.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
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Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination.
Goat	All susceptible age groups	De-worming against nematodes	- Tolzan-F @ 90ml/300 kg b.wt. once only.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease but deworm with before vaccination.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days - Provide clean & safe water by adding Sukrena (scnitzer) to avoid colebacilliosis.

Fisheries

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Ensure clean water free from algal blooms and pollution and maintain depth of 1.5 - 2.0 m. Apply lime regularly @ 25kg/ha in a month.
		Feed	Balanced feed containing vitamins and mineral mixtures @ 5% body weight should be provided in 3 splits in a day.
		Health	Spray CIFAX to protect brooders from diseases.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.7ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	Water depth should be maintained at 1.0 m. After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

I. Meghachandra Singh
Scientist i/c, IAAS



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16th April, 2013

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 17th to 21st April, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (12th to 15th April, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 12th and morning hours of 14th April. 3.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 22.9 – 31.1 °C, range of minimum temperature observed was 14.5 – 20.4 °C, mean relative humidity observed in morning and afternoon were 78.75 % and 53.25 % respectively. The average wind speed range was 3.7 – 10.0 km/hr.</p>	<p><u>Weather forecast for next five days of Imphal - West (17th to 21st April, 2013)</u></p> <p>There is likely to have light to moderate rain with thunder-squall during next three days. The sky is likely to be mainly cloudy. The maximum temp. is likely to be 20.0 - 28.0 °C. The minimum temp. is likely to be 14.0 – 16.0 °C. The maximum RH is likely to attain a max value of 94 %. Minimum RH is likely to reach a max of 92 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 19th April, 2013)

Rain/thundershowers would occur at a few places over northeastern states

Weather Warning during next 3 days

Thunderstorm accompanied with thundersquall may occur at one or two places over Manipur during next 48hrs

Weather Outlook for subsequent 4 days from 19th to 23rd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Nursery to transplanting and early vegetative		<ul style="list-style-type: none"> - Apply 88kg of DAP, 38 kg Urea and 32 kg MOP per hectare as basal dose at final ploughing. - Within two days of uprooting, 30-40 days old seedlings should be transplanted with 2-3 seedlings per hill for normal transplanting (spacing: 20 x 10 cm). For late transplanting (with older seedlings), plant 3-4 seedlings per hill for using marked/ beaded ropes. - Maintain a thin film of water of depth 3-5cm of water at transplanting stage.
Maize	Vegetative to flowering and sowing	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding should be done. - Provide wind breaks using bamboo and paddy straw to reduce losses due to thunderstorm. - sowing in lowland area can be done. Also, late sowing in upland area may be done.
Groundnut & soybean	Land preparation		Land preparation may be started.
Storage			- Clean and dry the seeds and store in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Citrus	All age	Leaf Miner	Insectides like Dichlorovos @ 0.5ml/lit of water or Cypermethrin@ 1ml/lit of water may be sprayed.
Bhindi	Land preparation to sowing		Land preparation as well as sowing in prepared beds may be done.



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Manipur Centre, Lamphelpat, Imphal - 795 004



“Integrated Agromet Advisory Services”

Alocassia	Planting		Alocassia planting may be done in upland and sunny area with fertile soil. Avoid area where there is water logging problem.
Cucurbits	Flowering to fruiting		Top dressing with 20gm DAP + 3gm MOP per plant will enhance fruiting. Provide proper support system for trailing types.
Tomato	Flowering to fruiting		- When the plants are 40-50 days old (in flowering stage) prophylactic measures against pod borer and early blight may be taken up after next three days ,i.e., after rains. Sprays must be given at least twice at 7-10 days interval.
Onion	Harvesting to post-harvesting		As there is rain during next three days, harvest onion. After harvesting spread in airy shed for 4-5 days and cut the leaves & roots. Then sorting may be done.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination.
Goat	All susceptible age groups	De-worming against nematodes	- Tolzan-F @ 90ml/300 kg b.wt. once only.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i> but deworm with before vaccination.
		<i>Coccidiosis</i>	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days - Provide clean & safe water by adding Sukrena (scnitzer) to avoid colebacilliosis.

Fisheries

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Ensure clean water free from algal blooms and pollution and maintain depth of 1.5 - 2.0 m. Apply lime regularly @ 25kg/ha in a month.
		Feed	Balanced feed containing vitamins and mineral mixtures @ 5% body weight should be provided in 3 splits in a day.
		Health	Spray CIFAX to protect brooders from diseases.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.7ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	Water depth should be maintained at 1.0 m. After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

I. Meghachandra Singh
 Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

16th April, 2013

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 17th to 21st April, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (12th to 15th April, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 12th and morning hours of 14th April. 3.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 22.9 – 31.1 °C, range of minimum temperature observed was 14.5 – 20.4 °C, mean relative humidity observed in morning and afternoon were 78.75 % and 53.25 % respectively. The average wind speed range was 3.7 – 10.0 km/hr.</p>	<p><u>Weather forecast for next five days of Senapati (17th to 21st April, 2013)</u></p> <p>There is likely to have light to moderate rain with thunder-squall during next three days. The sky is likely to be mainly cloudy. The maximum temp. is likely to be 20.0 - 27.0 °C. The minimum temp. is likely to be 14.0 – 16.0 °C. The maximum RH is likely to attain a max value of 92 %. Minimum RH is likely to reach a max of 88 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 19th April, 2013)

Rain/thundershowers would occur at a few places over northeastern states

Weather Warning during next 3 days

Thunderstorm accompanied with thundersquall may occur at one or two places over Manipur during next 48hrs

Weather Outlook for subsequent 4 days from 19th to 23rd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Nursery to transplanting and early vegetative		<ul style="list-style-type: none"> - Apply 88kg of DAP, 38 kg Urea and 32 kg MOP per hectare as basal dose at final ploughing. - Within two days of uprooting, 30-40 days old seedlings should be transplanted with 2-3 seedlings per hill for normal transplanting (spacing: 20 x 10 cm). For late transplanting (with older seedlings), plant 3-4 seedlings per hill for using marked/ beaded ropes. - Maintain a thin film of water of depth 3-5cm of water at transplanting stage.
Maize	Vegetative to flowering and sowing	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding should be done. - Provide wind breaks using bamboo and paddy straw to reduce losses due to thunderstorm. - sowing in lowland area can be done. Also, late sowing in upland area may be done.
Soybean	Land preparation		Land preparation may be started.
Storage			- Clean and dry the seeds and store in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Citrus	All age	Leaf Miner	Insecticides like Dichlorovos @ 0.5ml/lit of water or Cypermethrin @ 1ml/lit of water may be sprayed.
Alocassia	Planting		Alocassia planting may be done in upland and sunny area with fertile soil. Avoid area where there is water logging problem.



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Cucurbits	Flowering to fruiting		Top dressing with 20gm DAP + 3gm MOP per plant will enhance fruiting. Provide proper support system for trailing types.
Onion	Harvesting to post-harvesting		As there is rain during next three days, harvest onion. After harvesting spread in airy shed for 4-5 days and cut the leaves & roots. Then sorting may be done.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination.
Goat	All susceptible age groups	De-worming against nematodes	- Tolzan-F @ 90ml/300 kg b.wt. once only.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i> but deworm with before vaccination.
		Coccidiosis	- Poultry must be provided <i>Cocciostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days - Provide clean & safe water by adding Sukrena (scnitizer) to avoid colebacilliosis.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Ensure clean water free from algal blooms and pollution and maintain depth of 1.5 - 2.0 m. Apply lime regularly @ 25kg/ha in a month.
		Feed	Balanced feed containing vitamins and mineral mixtures @ 5% body weight should be provided in 3 splits in a day.
		Health	Spray CIFAX to protect brooders from diseases.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Breeding	pond	<ul style="list-style-type: none">▪ Pond should be free from insects, predators, aquatic weeds etc.▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil.▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ <i>0.5ml/kg fish</i> for breeding in both the brooders of common carp.▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ <i>0.7ml/kg fish</i> for breeding in both the brooders of grass carp.
	Nurseries	ponds	Water depth should be maintained at 1.0 m. After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

I. Meghachandra Singh
 Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

16th April, 2013

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 17th to 21st April, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (12th to 15th April, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 12th and morning hours of 14th April. 3.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 22.9 – 31.1 °C, range of minimum temperature observed was 14.5 – 20.4 °C, mean relative humidity observed in morning and afternoon were 78.75 % and 53.25 % respectively. The average wind speed range was 3.7 – 10.0 km/hr.</p>	<p><u>Weather forecast for next five days of Tamenglong (17th to 21st April, 2013)</u></p> <p>There is likely to have light to moderate rain with thunder-squall during next three days. The sky is likely to be mainly cloudy. The maximum temp. is likely to be 26.0 - 32.0 °C. The minimum temp. is likely to be 15.0 – 20.0 °C. The maximum RH is likely to attain a max value of 95 %. Minimum RH is likely to reach a max of 91 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 19th April, 2013)

Rain/thundershowers would occur at a few places over northeastern states

Weather Warning during next 3 days

Thunderstorm accompanied with thundersquall may occur at one or two places over Manipur during next 48hrs

Weather Outlook for subsequent 4 days from 19th to 23rd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Nursery to transplanting and early vegetative		<ul style="list-style-type: none"> - Apply 88kg of DAP, 38 kg Urea and 32 kg MOP per hectare as basal dose at final ploughing. - Within two days of uprooting, 30-40 days old seedlings should be transplanted with 2-3 seedlings per hill for normal transplanting (spacing: 20 x 10 cm). For late transplanting (with older seedlings), plant 3-4 seedlings per hill for using marked/ beaded ropes. - Maintain a thin film of water of depth 3-5cm of water at transplanting stage.
Maize	Vegetative to flowering and sowing	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding should be done. - Provide wind breaks using bamboo and paddy straw to reduce losses due to thunderstorm. - sowing in lowland area can be done. Also, late sowing in upland area may be done.
Groundnut & soybean	Land preparation		Land preparation may be started.
Storage			- Clean and dry the seeds and store in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Citrus	All age	Leaf Miner	Insectides like Dichlorovos @ 0.5ml/lit of water or Cypermethrin@ 1ml/lit of water may be sprayed.
Bhindi	Land preparation to sowing		Land preparation as well as sowing in prepared beds may be done.



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Manipur Centre, Lamphelpat, Imphal - 795 004



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Alocassia	Planting		Alocassia planting may be done in upland and sunny area with fertile soil. Avoid area where there is water logging problem.
Cucurbits	Flowering to fruiting		Top dressing with 20gm DAP + 3gm MOP per plant will enhance fruiting. Provide proper support system for trailing types.
Tomato	Flowering to fruiting		- When the plants are 40-50 days old (in flowering stage) prophylactic measures against pod borer and early blight may be taken up after next three days ,i.e., after rains. Sprays must be given at least twice at 7-10 days interval.
Onion	Harvesting to post-harvesting		As there is rain during next three days, harvest onion. After harvesting spread in airy shed for 4-5 days and cut the leaves & roots. Then sorting may be done.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination.
Goat	All susceptible age groups	De-worming against nematodes	- Tolzan-F @ 90ml/300 kg b.wt. once only.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i> but deworm with before vaccination.
		<i>Coccidiosis</i>	- Poultry must be provided <i>Coccidiostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days - Provide clean & safe water by adding Sukrena (scnitzer) to avoid colebacilliosis.

Fisheries

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Ensure clean water free from algal blooms and pollution and maintain depth of 1.5 - 2.0 m. Apply lime regularly @ 25kg/ha in a month.
		Feed	Balanced feed containing vitamins and mineral mixtures @ 5% body weight should be provided in 3 splits in a day.
		Health	Spray CIFAX to protect brooders from diseases.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.7ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	Water depth should be maintained at 1.0 m. After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

I. Meghachandra Singh
 Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

16th April, 2013

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 17th to 21st April, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (12th to 15th April, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 12th and morning hours of 14th April. 3.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 22.9 – 31.1 °C, range of minimum temperature observed was 14.5 – 20.4 °C, mean relative humidity observed in morning and afternoon were 78.75 % and 53.25 % respectively. The average wind speed range was 3.7 – 10.0 km/hr.</p>	<p><u>Weather forecast for next five days of Thoubal (17th to 21st April, 2013)</u></p> <p>There is likely to have light to moderate rain with thunder-squall during next three days. The sky is likely to be mainly cloudy. The maximum temp. is likely to be 25.0 - 30.0 °C. The minimum temp. is likely to be 15.0 – 17.0 °C. The maximum RH is likely to attain a max value of 93 %. Minimum RH is likely to reach a max of 68 %. The average wind speed during next five days may reach upto max. value of 2 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 19th April, 2013)

Rain/thundershowers would occur at a few places over northeastern states

Weather Warning during next 3 days

Thunderstorm accompanied with thundersquall may occur at one or two places over Manipur during next 48hrs

Weather Outlook for subsequent 4 days from 19th to 23rd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Nursery to transplanting and early vegetative		<ul style="list-style-type: none"> - Apply 88kg of DAP, 38 kg Urea and 32 kg MOP per hectare as basal dose at final ploughing. - Within two days of uprooting, 30-40 days old seedlings should be transplanted with 2-3 seedlings per hill for normal transplanting (spacing: 20 x 10 cm). For late transplanting (with older seedlings), plant 3-4 seedlings per hill for using marked/ beaded ropes. - Maintain a thin film of water of depth 3-5cm of water at transplanting stage.
Maize	Vegetative to flowering and sowing	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding should be done. - Provide wind breaks using bamboo and paddy straw to reduce losses due to thunderstorm. - sowing in lowland area can be done. Also, late sowing in upland area may be done.
Groundnut & soybean	Land preparation		Land preparation may be started.
Storage			- Clean and dry the seeds and store in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Citrus	All age	Leaf Miner	Insectides like Dichlorovos @ 0.5ml/lit of water or Cypermethrin @ 1ml/lit of water may be sprayed.
Bhindi	Land preparation to sowing		Land preparation as well as sowing in prepared beds may be done.



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



“Integrated Agromet Advisory Services”

Alocassia	Planting		Alocassia planting may be done in upland and sunny area with fertile soil. Avoid area where there is water logging problem.
Cucurbits	Flowering to fruiting		Top dressing with 20gm DAP + 3gm MOP per plant will enhance fruiting. Provide proper support system for trailing types.
Tomato	Flowering to fruiting		- When the plants are 40-50 days old (in flowering stage) prophylactic measures against pod borer and early blight may be taken up after next three days ,i.e., after rains. Sprays must be given at least twice at 7-10 days interval.
Onion	Harvesting to post-harvesting		As there is rain during next three days, harvest onion. After harvesting spread in airy shed for 4-5 days and cut the leaves & roots. Then sorting may be done.

Animal Sciences

Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with Swine Fever vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination.
Goat	All susceptible age groups	De-worming against nematodes	- Tolzan-F @ 90ml/300 kg b.wt. once only.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against Ranikhet disease but deworm with before vaccination.
		Coccidiosis	- Poultry must be provided Coccidiostat/ Supercox (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days - Provide clean & safe water by adding Sukrena (scnitzer) to avoid colebacilliosis.

Fisheries

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Ensure clean water free from algal blooms and pollution and maintain depth of 1.5 - 2.0 m. Apply lime regularly @ 25kg/ha in a month.
		Feed	Balanced feed containing vitamins and mineral mixtures @ 5% body weight should be provided in 3 splits in a day.
		Health	Spray CIFAX to protect brooders from diseases.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Breeding	pond	<ul style="list-style-type: none"> ▪ Pond should be free from insects, predators, aquatic weeds etc. ▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.5ml/kg fish for breeding in both the brooders of common carp. ▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ 0.7ml/kg fish for breeding in both the brooders of grass carp.
	Nurseries	ponds	Water depth should be maintained at 1.0 m. After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

I. Meghachandra Singh
 Scientist i/c, IAAS



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

16th April, 2013

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 17th to 21st April, 2013 as given below:

<p><u>Significant past weather for the preceding bi-weekly of Imphal - West (12th to 15th April, 2013)</u></p> <p>During the past four days the sky was partly cloudy to cloudy but mainly clear during afternoon hours of 12th and morning hours of 14th April. 3.8 mm rainfall was recorded during past four days. Maximum temperature range observed was 22.9 – 31.1 °C, range of minimum temperature observed was 14.5 – 20.4 °C, mean relative humidity observed in morning and afternoon were 78.75 % and 53.25 % respectively. The average wind speed range was 3.7 – 10.0 km/hr.</p>	<p><u>Weather forecast for next five days of Ukhrul (17th to 21st April, 2013)</u></p> <p>There is likely to have light to moderate rain with thunder-squall during next three days. The sky is likely to be mainly cloudy. The maximum temp. is likely to be 20.0 - 28.0 °C. The minimum temp. is likely to be 14.0 – 16.0 °C. The maximum RH is likely to attain a max value of 86 %. Minimum RH is likely to reach a max of 63 %. The average wind speed during next five days may reach upto max. value of 5 km/hr.</p>
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Weather Forecast for next 3 days (upto 0830 hours IST of 19th April, 2013)

Rain/thundershowers would occur at a few places over northeastern states

Weather Warning during next 3 days

Thunderstorm accompanied with thundersquall may occur at one or two places over Manipur during next 48hrs

Weather Outlook for subsequent 4 days from 19th to 23rd April, 2013

Rain/thundershowers would occur at one or two places over northeastern states.

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
Pre- Kharif Rice	Nursery to transplanting and early vegetative		<ul style="list-style-type: none"> - Apply 88kg of DAP, 38 kg Urea and 32 kg MOP per hectare as basal dose at final ploughing. - Within two days of uprooting, 30-40 days old seedlings should be transplanted with 2-3 seedlings per hill for normal transplanting (spacing: 20 x 10 cm). For late transplanting (with older seedlings), plant 3-4 seedlings per hill for using marked/ beaded ropes. - Maintain a thin film of water of depth 3-5cm of water at transplanting stage.
Maize	Vegetative to flowering and sowing	- Shoot borer	<ul style="list-style-type: none"> - Apply 2-3 granules of Furadan 3G at the whorl of infected plant. - Weeding should be done. - Provide wind breaks using bamboo and paddy straw to reduce losses due to thunderstorm. - sowing in lowland area can be done. Also, late sowing in upland area may be done.
Soybean	Land preparation		Land preparation may be started.
Storage			- Clean and dry the seeds and store in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
Horticulture Crops			
Citrus	All age	Leaf Miner	Insecticides like Dichlorovos @ 0.5ml/lit of water or Cypermethrin @ 1ml/lit of water may be sprayed.
Alocassia	Planting		Alocassia planting may be done in upland and sunny area with fertile soil. Avoid area where there is water logging problem.



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



“Integrated Agromet Advisory Services”

Cucurbits	Flowering to fruiting		Top dressing with 20gm DAP + 3gm MOP per plant will enhance fruiting. Provide proper support system for trailing types.
Onion	Harvesting to post-harvesting		As there is rain during next three days, harvest onion. After harvesting spread in airy shed for 4-5 days and cut the leaves & roots. Then sorting may be done.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Pig	Above 3 months of age	Swine Fever	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination.
Cattle / Buffalo/ Mithun	All age groups except three months or below	B.Q. and Haemorrhagic Septicaemia	- Vaccination of B.Q. and H.S. polyvalent (dose as per recommendation) is advised but deworm with appropriate agent before vaccination.
Goat	All susceptible age groups	De-worming against nematodes	- Tolzan-F @ 90ml/300 kg b.wt. once only.
Poultry	All susceptible age groups	Ranikhet Disease	- By the end of winter and before summer sets in, birds should be vaccinated against <i>Ranikhet disease</i> but deworm with before vaccination.
		Coccidiosis	- Poultry must be provided <i>Cocciostat/ Supercox</i> (@ 1g/lit of drinking water) + plus 150gm of Glucose and vit K for 5 to 7 days - Provide clean & safe water by adding Sukrena (scnitizer) to avoid colebacilliosis.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Common carp & grass carp brooders	Pond and water	Ensure clean water free from algal blooms and pollution and maintain depth of 1.5 - 2.0 m. Apply lime regularly @ 25kg/ha in a month.
		Feed	Balanced feed containing vitamins and mineral mixtures @ 5% body weight should be provided in 3 splits in a day.
		Health	Spray CIFAX to protect brooders from diseases.
		Fish	Male and female brooders should be stock in separate ponds. Brooders of 2-3 years old having more than 1kg should be selected for seed production.
	Breeding	pond	<ul style="list-style-type: none">▪ Pond should be free from insects, predators, aquatic weeds etc.▪ Water should be clean, clear having pH, 7.0-7.5; dissolved oxygen 6-8ppm, carbon dioxide –nil.▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ <i>0.5ml/kg fish</i> for breeding in both the brooders of common carp.▪ Hormone like ovaprim, ovatide or Wova-FH may be injected @ <i>0.7ml/kg fish</i> for breeding in both the brooders of grass carp.
	Nurseries	ponds	Water depth should be maintained at 1.0 m. After liming nursery ponds should be fertilized prior 15 days of spawn stocking. Feeding should be done 2-3 times a day @5-10% body weight/day.

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