



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



“Integrated Agromet Advisory Services”

MANIPUR BULLETIN

17th September, 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 18th to 22nd September, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (13th to 16th September, 2013)</u></p> <p>During the past four days the sky was partly cloudy upto 14th then mainly cloudy to cloudy thereafter. 34.5 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.9 – 33.3 °C, range of minimum temperature observed was 19.6 – 21.7 °C, mean relative humidity observed in morning and afternoon were 92.0 % and 75.75 % respectively. The average wind speed range was 1.3 – 2.5 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Churachandpur (18th to 22nd September, 2013)</u></p> <p>It is likely to have no rains during next five days except on 21st with moderate rains. The sky may be partly cloudy to mainly cloudy but cloudy on 21st with maximum temp. of 26.0 - 30.0 °C and minimum temp. of 17.0 – 20.0 °C. The maximum RH may attain max of 100 % and minimum RH of 81 %. The average wind speed during next five days may be 2-3 km/hr.</p>
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Main Weather Observations: Kalpana1- Cloud imagery at 0530 hours IST shows convective clouds over parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 20th September, 2013): Rain/thundershowers would occur at a few places over Manipur

Weather Outlook for subsequent 4 days from 20th September to 24th September, 2013: Rain/thundershower would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying. Farmers are advised to add stickers @ 5ml/ pump.			
Rice	Panicle initiation to flowering (for normal sowing)		- Weed out and top dress with remaining urea dose @ 33 Kg/ ha after 45 days of transplanting. Fertilizer must be applied after proper draining and weeding. Water should be maintained at 5cm level upto dough stage.
	Tillering to panicle initiation (for late sowing)		- Weeding must be done before flowering stage. - Weed out at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Sheath rot	Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Borer	Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water.
		Case worm, leaf folder, whorl maggot	Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	Thiomethoxam @ 5g/ 15 lit water.
	Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).	
	Plant hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.	
Soybean	Flowering to pod formation	Hairy caterpillars Rust	- Weeding may be done. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Bayleton @ 10g/ 15 ml of water.
Groundnut	Pegging	Hairy caterpillars Tikka disease Rust	- Earthing up must be done at peg formation stage. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Redomil75% MZ @ 15g/ 15litre water. - Bayleton @ 10g/ 15 ml of water.
Blackgram / rice bean	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days and 45 days after sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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Horticulture Crops			
* To prevent damping off diseases of vegetables, treat soil of nursery bed with Carbendazim@ 2-3g/ lit water. Seed may be treated with Dithane M-45/ Thiram/ Captan @ 2g/kg seed. - Sowing of rabi vegetables may be started without delay in the plots where crops (like colocassia/ maize, etc.) had just been harvested.			
Rabi vegetables	Land preparation		Procure good quality seeds of carrot, reddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting.
Garden pea/ french bean	Land preparation		- Sowing of pea/ French bean may be done in the plot where colocasia/ cucurbits, etc. had been harvested and raised beds had been prepared.
Tomato (off season)	Fruiting	Fruit & shoot borer Early blight	- Deltamethrin 12% @ 7ml/15 lit water. - Spray Dithane M-45@ 2g/lit of water.
Cucumber (off season)	Fruiting		Proper nutrition with light & frequent irrigation at flowering stage is important for good growth and development of the fruit.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally 2 1 bolus/ 100 kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Albend @ 15 ml orally once for adult.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite	- Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
		B.Q. and H.S.	- Vaccinate against B.Q. & H.S.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water accompanied with Brotone liquid @ 5-10 ml/ 100 birds.
		<i>Coccidiosis</i>	- Administer <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manuring using raw cow dung (RCD) @ 10,000 kg/ha (in ten splits) after every 30 days must be done. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha in valley and 300kg in hills. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

I. Meghachandra Singh
Scientist i/c, IAAS



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MANIPUR BULLETIN

17th September, 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 18th to 22nd September, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (13th to 16th September, 2013)</u></p> <p>During the past four days the sky was partly cloudy upto 14th then mainly cloudy to cloudy thereafter. 34.5 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.9 – 33.3 °C, range of minimum temperature observed was 19.6 – 21.7 °C, mean relative humidity observed in morning and afternoon were 92.0 % and 75.75 % respectively. The average wind speed range was 1.3 – 2.5 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Imphal - East (18th to 22nd September, 2013)</u></p> <p>It is likely to have no rains during next five days except on 21st with moderate rains. The sky may be partly cloudy to mainly cloudy but cloudy on 21st with maximum temp. of 27.0 - 31.0 °C and minimum temp. of 20.0 – 21.0 °C. The maximum RH may attain max of 100 % and minimum RH of 83 %. The average wind speed during next five days may be 2-3 km/hr.</p>
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Main Weather Observations: Kalpana1- Cloud imagery at 0530 hours IST shows convective clouds over parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 20th September, 2013): Rain/thundershowers would occur at a few places over Manipur

Weather Outlook for subsequent 4 days from 20th September to 24th September, 2013: Rain/thundershower would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying. Farmers are advised to add stickers @ 5ml/ pump.			
Rice	Panicle initiation to flowering (for normal sowing)		- Weed out and top dress with remaining urea dose @ 33 Kg/ ha after 45 days of transplanting. Fertilizer must be applied after proper draining and weeding. Water should be maintained at 5cm level upto dough stage.
	Tillering to panicle initiation (for late sowing)		- Weeding must be done before flowering stage. - Weed out at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Sheath rot	Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Borer	Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water.
		Case worm, leaf folder, whorl maggot	Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	Thiomethoxam @ 5g/ 15 lit water.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
	Plant hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.	
Soybean	Flowering to pod formation	Hairy caterpillars Rust	- Weeding may be done. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Bayleton @ 10g/ 15 ml of water.
Groundnut	Pegging	Hairy caterpillars Tikka disease Rust	- Earthing up must be done at peg formation stage. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Redomil75% MZ @ 15g/ 15litre water. - Bayleton @ 10g/ 15 ml of water.
Blackgram / rice bean	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days and 45 days after sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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Horticulture Crops			
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Rabi vegetables	Land preparation		Procure good quality seeds of carrot, reddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting.
Garden pea/ french bean	Land preparation		- Sowing of pea/ French bean may be done in the plot where colocasia/ cucurbits, etc. had been harvested and raised beds had been prepared.
Tomato (off season)	Fruiting	Fruit & shoot borer Early blight	- Deltamethrin 12% @ 7ml/15 lit water. - Spray Dithane M-45@ 2g/lit of water.
Cucumber (off season)	Fruiting		Proper nutrition with light & frequent irrigation at flowering stage is important for good growth and development of the fruit.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally 2 1 bolus/ 100 kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Albend @ 15 ml orally once for adult.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite	- Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
		B.Q. and H.S.	- Vaccinate against B.Q. & H.S.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water accompanied with Brotone liquid @ 5-10 ml/ 100 birds.
		<i>Coccidiosis</i>	- Administer <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manuring using raw cow dung (RCD) @ 10,000 kg/ha (in ten splits) after every 30 days must be done. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha in valley and 300kg in hills. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

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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 18th to 22nd September, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (13th to 16th September, 2013)</u></p> <p>During the past four days the sky was partly cloudy upto 14th then mainly cloudy to cloudy thereafter. 34.5 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.9 – 33.3 °C, range of minimum temperature observed was 19.6 – 21.7 °C, mean relative humidity observed in morning and afternoon were 92.0 % and 75.75 % respectively. The average wind speed range was 1.3 – 2.5 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Imphal - West (18th to 22nd September, 2013)</u></p> <p>It is likely to have no rains during next five days except on 21st with moderate rains. The sky may be partly cloudy to mainly cloudy but cloudy on 21st with maximum temp. of 27.0 - 32.0 °C and minimum temp. of 20.0 – 22.0 °C. The maximum RH may attain max of 100 % and minimum RH of 76 %. The average wind speed during next five days may be 2-3 km/hr.</p>
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Main Weather Observations: Kalpana1- Cloud imagery at 0530 hours IST shows convective clouds over parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 20th September, 2013): Rain/thundershowers would occur at a few places over Manipur

Weather Outlook for subsequent 4 days from 20th September to 24th September, 2013: Rain/thundershower would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying. Farmers are advised to add stickers @ 5ml/ pump.			
Rice	Panicle initiation to flowering (for normal sowing)		- Weed out and top dress with remaining urea dose @ 33 Kg/ ha after 45 days of transplanting. Fertilizer must be applied after proper draining and weeding. Water should be maintained at 5cm level upto dough stage.
	Tillering to panicle initiation (for late sowing)		- Weeding must be done before flowering stage. - Weed out at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Sheath rot	Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Borer	Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water.
		Case worm, leaf folder, whorl maggot	Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
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	Plant hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.	
Soybean	Flowering to pod formation	Hairy caterpillars Rust	- Weeding may be done. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Bayleton @ 10g/ 15 ml of water.
Groundnut	Pegging	Hairy caterpillars Tikka disease Rust	- Earthing up must be done at peg formation stage. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Redomil75% MZ @ 15g/ 15litre water. - Bayleton @ 10g/ 15 ml of water.
Blackgram / rice bean	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days and 45 days after sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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	Nurseries		Apply agri-lime @250kg/ha in valley and 300kg in hills. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
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17th September, 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 18th to 22nd September, 2013 as given below:

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Weather Outlook for subsequent 4 days from 20th September to 24th September, 2013: Rain/thundershower would occur at many places over northeastern states

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Horticulture Crops			
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Garden pea/ french bean	Land preparation		- Sowing of pea/ French bean may be done in the plot where colocasia/ cucurbits, etc. had been harvested and raised beds had been prepared.
Tomato (off season)	Fruiting	Fruit & shoot borer Early blight	- Deltamethrin 12% @ 7ml/15 lit water. - Spray Dithane M-45@ 2g/lit of water.
Cucumber (off season)	Fruiting		Proper nutrition with light & frequent irrigation at flowering stage is important for good growth and development of the fruit.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally 2 1 bolus/ 100 kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Albend @ 15 ml orally once for adult.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite	- Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
		B.Q. and H.S.	- Vaccinate against B.Q. & H.S.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water accompanied with Brotone liquid @ 5-10 ml/ 100 birds.
		<i>Coccidiosis</i>	- Administer <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manuring using raw cow dung (RCD) @ 10,000 kg/ha (in ten splits) after every 30 days must be done. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha in valley and 300kg in hills. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

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

17th September, 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 18th to 22nd September, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (13th to 16th September, 2013)</u>	<u>Weather forecast for next five days of Tamenglong (18th to 22nd September, 2013)</u>
During the past four days the sky was partly cloudy upto 14 th then mainly cloudy to cloudy thereafter. 34.5 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.9 – 33.3 °C, range of minimum temperature observed was 19.6 – 21.7 °C, mean relative humidity observed in morning and afternoon were 92.0 % and 75.75 % respectively. The average wind speed range was 1.3 – 2.5 km/hr.	It is likely to have no rains during next five days except on 21 st with moderate rains. The sky may be partly cloudy to mainly cloudy but cloudy on 21 st with maximum temp. of 28.0 - 33.0 °C and minimum temp. of 20.0 – 23.0 °C. The maximum RH may attain max of 100 % and minimum RH of 72 %. The average wind speed during next five days may be 2 km/hr.

Main Weather Observations: Kalpana1- Cloud imagery at 0530 hours IST shows convective clouds over parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 20th September, 2013): Rain/thundershowers would occur at a few places over Manipur

Weather Outlook for subsequent 4 days from 20th September to 24th September, 2013: Rain/thundershower would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying. Farmers are advised to add stickers @ 5ml/ pump.			
Rice	Panicle initiation to flowering (for normal sowing)		- Weed out and top dress with remaining urea dose @ 33 Kg/ ha after 45 days of transplanting. Fertilizer must be applied after proper draining and weeding. Water should be maintained at 5cm level upto dough stage.
	Tillering to panicle initiation (for late sowing)		- Weeding must be done before flowering stage. - Weed out at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Sheath rot	Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Borer	Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water.
		Case worm, leaf folder, whorl maggot	Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	Thiomethoxam @ 5g/ 15 lit water.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
	Plant hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.	
Soybean	Flowering to pod formation	Hairy caterpillars Rust	- Weeding may be done. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Bayleton @ 10g/ 15 ml of water.
Groundnut	Pegging	Hairy caterpillars Tikka disease Rust	- Earthing up must be done at peg formation stage. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Redomil75% MZ @ 15g/ 15litre water. - Bayleton @ 10g/ 15 ml of water.
Blackgram / rice bean	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days and 45 days after sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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



“Integrated Agromet Advisory Services”

Horticulture Crops			
* To prevent damping off diseases of vegetables, treat soil of nursery bed with Carbendazim@ 2-3g/ lit water. Seed may be treated with Dithane M-45/ Thiram/ Captan @ 2g/kg seed. - Sowing of rabi vegetables may be started without delay in the plots where crops (like colocassia/ maize, etc.) had just been harvested.			
Rabi vegetables	Land preparation		Procure good quality seeds of carrot, reddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting.
Garden pea/ french bean	Land preparation		- Sowing of pea/ French bean may be done in the plot where colocasia/ cucurbits, etc. had been harvested and raised beds had been prepared.
Tomato (off season)	Fruiting	Fruit & shoot borer Early blight	- Deltamethrin 12% @ 7ml/15 lit water. - Spray Dithane M-45@ 2g/lit of water.
Cucumber (off season)	Fruiting		Proper nutrition with light & frequent irrigation at flowering stage is important for good growth and development of the fruit.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally 2 1 bolus/ 100 kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Albend @ 15 ml orally once for adult.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite	- Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
		B.Q. and H.S.	- Vaccinate against B.Q. & H.S.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water accompanied with Brotone liquid @ 5-10 ml/ 100 birds.
		Coccidiosis	- Administer Coximar (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manuring using raw cow dung (RCD) @ 10,000 kg/ha (in ten splits) after every 30 days must be done. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha in valley and 300kg in hills. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

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

17th September, 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 18th to 22nd September, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (13th to 16th September, 2013)</u>	<u>Weather forecast for next five days of Thoubal (18th to 22nd September, 2013)</u>
During the past four days the sky was partly cloudy upto 14 th then mainly cloudy to cloudy thereafter. 34.5 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.9 – 33.3 °C, range of minimum temperature observed was 19.6 – 21.7 °C, mean relative humidity observed in morning and afternoon were 92.0 % and 75.75 % respectively. The average wind speed range was 1.3 – 2.5 km/hr.	It is likely to have no rains during next five days except on 21 st with moderate rains. The sky may be partly cloudy to mainly cloudy but cloudy on 21 st with maximum temp. of 27.0 - 31.0 °C and minimum temp. of 19.0 – 21.0 °C. The maximum RH may attain max of 100 % and minimum RH of 90 %. The average wind speed during next five days may be 2 km/hr.

Main Weather Observations: Kalpana1- Cloud imagery at 0530 hours IST shows convective clouds over parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 20th September, 2013): Rain/thundershowers would occur at a few places over Manipur

Weather Outlook for subsequent 4 days from 20th September to 24th September, 2013: Rain/thundershower would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying. Farmers are advised to add stickers @ 5ml/ pump.			
Rice	Panicle initiation to flowering (for normal sowing)		- Weed out and top dress with remaining urea dose @ 33 Kg/ ha after 45 days of transplanting. Fertilizer must be applied after proper draining and weeding. Water should be maintained at 5cm level upto dough stage.
	Tillering to panicle initiation (for late sowing)		- Weeding must be done before flowering stage. - Weed out at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Sheath rot	Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Borer	Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water.
		Case worm, leaf folder, whorl maggot	Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	Thiomethoxam @ 5g/ 15 lit water.
	Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).	
	Plant hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.	
Soybean	Flowering to pod formation	Hairy caterpillars Rust	- Weeding may be done. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Bayleton @ 10g/ 15 ml of water.
Groundnut	Pegging	Hairy caterpillars Tikka disease Rust	- Earthing up must be done at peg formation stage. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Redomil75% MZ @ 15g/ 15litre water. - Bayleton @ 10g/ 15 ml of water.
Blackgram / rice bean	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days and 45 days after sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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



“Integrated Agromet Advisory Services”

Horticulture Crops			
* To prevent damping off diseases of vegetables, treat soil of nursery bed with Carbendazim@ 2-3g/ lit water. Seed may be treated with Dithane M-45/ Thiram/ Captan @ 2g/kg seed. - Sowing of rabi vegetables may be started without delay in the plots where crops (like colocassia/ maize, etc.) had just been harvested.			
Rabi vegetables	Land preparation		Procure good quality seeds of carrot, reddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting.
Garden pea/ french bean	Land preparation		- Sowing of pea/ French bean may be done in the plot where colocasia/ cucurbits, etc. had been harvested and raised beds had been prepared.
Tomato (off season)	Fruiting	Fruit & shoot borer Early blight	- Deltamethrin 12% @ 7ml/15 lit water. - Spray Dithane M-45@ 2g/lit of water.
Cucumber (off season)	Fruiting		Proper nutrition with light & frequent irrigation at flowering stage is important for good growth and development of the fruit.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally 2 1 bolus/ 100 kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Albend @ 15 ml orally once for adult.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite	- Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
		B.Q. and H.S.	- Vaccinate against B.Q. & H.S.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water accompanied with Brotone liquid @ 5-10 ml/ 100 birds.
		<i>Coccidiosis</i>	- Administer <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manuring using raw cow dung (RCD) @ 10,000 kg/ha (in ten splits) after every 30 days must be done. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha in valley and 300kg in hills. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

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

17th September, 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 18th to 22nd September, 2013 as given below:

<u>Significant past weather for the preceding bi-weekly of Imphal - West (13th to 16th September, 2013)</u>	<u>Weather forecast for next five days of Ukhrul (18th to 22nd September, 2013)</u>
During the past four days the sky was partly cloudy upto 14 th then mainly cloudy to cloudy thereafter. 34.5 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.9 – 33.3 °C, range of minimum temperature observed was 19.6 – 21.7 °C, mean relative humidity observed in morning and afternoon were 92.0 % and 75.75 % respectively. The average wind speed range was 1.3 – 2.5 km/hr.	It is likely to have no rains during next five days except on 21 st with moderate rains. The sky may be partly cloudy to mainly cloudy but cloudy on 21 st with maximum temp. of 24.0 - 27.0 °C and minimum temp. of 12.0 – 16.0 °C. The maximum RH may attain max of 98 % and minimum RH of 81 %. The average wind speed during next five days may be 2-3 km/hr.

Main Weather Observations: Kalpana1- Cloud imagery at 0530 hours IST shows convective clouds over parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 20th September, 2013): Rain/thundershowers would occur at a few places over Manipur

Weather Outlook for subsequent 4 days from 20th September to 24th September, 2013: Rain/thundershower would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying. Farmers are advised to add stickers @ 5ml/ pump.			
Rice	Panicle initiation to flowering (for normal sowing)		- Weed out and top dress with remaining urea dose @ 33 Kg/ ha after 45 days of transplanting. Fertilizer must be applied after proper draining and weeding. Water should be maintained at 5cm level upto dough stage.
	Tillering to panicle initiation (for late sowing)		- Weeding must be done before flowering stage. - Weed out at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Sheath rot	Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Borer	Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water.
		Case worm, leaf folder, whorl maggot	Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	Thiomethoxam @ 5g/ 15 lit water.
		Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).
	Plant hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.	
Soybean	Flowering to pod formation	Hairy caterpillars Rust	- Weeding may be done. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Bayleton @ 10g/ 15 ml of water.
Groundnut	Pegging	Hairy caterpillars Tikka disease Rust	- Earthing up must be done at peg formation stage. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Redomil75% MZ @ 15g/ 15litre water. - Bayleton @ 10g/ 15 ml of water.
Blackgram / rice bean	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days and 45 days after sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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



“Integrated Agromet Advisory Services”

Horticulture Crops			
* To prevent damping off diseases of vegetables, treat soil of nursery bed with Carbendazim@ 2-3g/ lit water. Seed may be treated with Dithane M-45/ Thiram/ Captan @ 2g/kg seed. - Sowing of rabi vegetables may be started without delay in the plots where crops (like colocassia/ maize, etc.) had just been harvested.			
Rabi vegetables	Land preparation		Procure good quality seeds of carrot, reddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting.
Garden pea/ french bean	Land preparation		- Sowing of pea/ French bean may be done in the plot where colocasia/ cucurbits, etc. had been harvested and raised beds had been prepared.
Tomato (off season)	Fruiting	Fruit & shoot borer Early blight	- Deltamethrin 12% @ 7ml/15 lit water. - Spray Dithane M-45@ 2g/lit of water.
Cucumber (off season)	Fruiting		Proper nutrition with light & frequent irrigation at flowering stage is important for good growth and development of the fruit.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally 2 1 bolus/ 100 kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Albend @ 15 ml orally once for adult.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite	- Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
		B.Q. and H.S.	- Vaccinate against B.Q. & H.S.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water accompanied with Brotone liquid @ 5-10 ml/ 100 birds.
		<i>Coccidiosis</i>	- Administer <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manuring using raw cow dung (RCD) @ 10,000 kg/ha (in ten splits) after every 30 days must be done. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha in valley and 300kg in hills. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

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

17th September, 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 18th to 22nd September, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (13th to 16th September, 2013)</u></p> <p>During the past four days the sky was partly cloudy upto 14th then mainly cloudy to cloudy thereafter. 34.5 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.9 – 33.3 °C, range of minimum temperature observed was 19.6 – 21.7 °C, mean relative humidity observed in morning and afternoon were 92.0 % and 75.75 % respectively. The average wind speed range was 1.3 – 2.5 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Bishnupur (18th to 22nd September, 2013)</u></p> <p>It is likely to have no rains during next five days except on 21st with moderate rains. The sky may be partly cloudy to mainly cloudy but cloudy on 21st with maximum temp. of 26.0 - 31.0 °C and minimum temp. of 18.0 – 20.0 °C. The maximum RH may attain max of 100 % and minimum RH of 84 %. The average wind speed during next five days may be 2 km/hr.</p>
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Main Weather Observations: Kalpana1- Cloud imagery at 0530 hours IST shows convective clouds over parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 20th September, 2013): Rain/thundershowers would occur at a few places over Manipur

Weather Outlook for subsequent 4 days from 20th September to 24th September, 2013: Rain/thundershower would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying. Farmers are advised to add stickers @ 5ml/ pump.			
Rice	Panicle initiation to flowering (for normal sowing)		- Weed out and top dress with remaining urea dose @ 33 Kg/ ha after 45 days of transplanting. Fertilizer must be applied after proper draining and weeding. Water should be maintained at 5cm level upto dough stage.
	Tillering to panicle initiation (for late sowing)		- Weeding must be done before flowering stage. - Weed out at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
		Sheath rot	Kocide-101 @ 20g/15 lit of water or Propiconazole @ 15ml/15lit of water.
		Sheath blight/ Bakani	Carbendazim @ 30-40g/ 15 lit of water or Hexaconazole @ 15ml/ 15 lit of water.
		Borer	Coragen @3ml/15 lit of water or Fipronil @ 2g/15 lit water.
		Case worm, leaf folder, whorl maggot	Lambdacythothrin @ 15ml/ 15 litre of water (at least 5-6 pumps per sangam).
		Gall midge	Thiomethoxam @ 5g/ 15 lit water.
	Bacterial leaf blight	Streptocycline @ 1g/15 litres of water (at least 5-6 pumps per sangam).	
	Plant hopper or any sucking insect	Imidachloprid @ 7ml/ 15 litres of water.	
Soybean	Flowering to pod formation	Hairy caterpillars Rust	- Weeding may be done. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Bayleton @ 10g/ 15 ml of water.
Groundnut	Pegging	Hairy caterpillars Tikka disease Rust	- Earthing up must be done at peg formation stage. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Redomil75% MZ @ 15g/ 15litre water. - Bayleton @ 10g/ 15 ml of water.
Blackgram / rice bean	Vegetative	Hairy caterpillars	- Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Weeding may be done at 30 days and 45 days after sowing.
Storage			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.



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“Integrated Agromet Advisory Services”

Horticulture Crops			
* To prevent damping off diseases of vegetables, treat soil of nursery bed with Carbendazim@ 2-3g/ lit water. Seed may be treated with Dithane M-45/ Thiram/ Captan @ 2g/kg seed. - Sowing of rabi vegetables may be started without delay in the plots where crops (like colocassia/ maize, etc.) had just been harvested.			
Rabi vegetables	Land preparation		Procure good quality seeds of carrot, reddish, coriander, cauliflower, cabbage, broccoli, etc. Prepare land for sowing or planting.
Garden pea/ french bean	Land preparation		- Sowing of pea/ French bean may be done in the plot where colocasia/ cucurbits, etc. had been harvested and raised beds had been prepared.
Tomato (off season)	Fruiting	Fruit & shoot borer Early blight	- Deltamethrin 12% @ 7ml/15 lit water. - Spray Dithane M-45@ 2g/lit of water.
Cucumber (off season)	Fruiting		Proper nutrition with light & frequent irrigation at flowering stage is important for good growth and development of the fruit.
Tree bean	Trees above 7yrs age/ Bearing plants		Apply (60gm DAP + 10g MOP + 20g Carbofuran 3G) per plant.
Animal Sciences			
Name of the animal	Growth stage	Disease/ infestation	Agro-meteorological advisories
Sheep/ Goat	Above 3 months of age	Deworming	- Administer Banif Bolus orally 2 1 bolus/ 100 kg b. wt.
Pig	Above 3 months of age	Helminth parasite - A.suum - Oesophagostomum sp.	- Administer Albend @ 15 ml orally once for adult.
		Ectoparasites	- Spray Butox @ 2ml in 1 lit of water, twice a week.
Cattle / Buffalo/ Mithun	Above 3 months of age	Helminth parasite	- Administer Nilzan-90ml suspension @90ml for 300 kg b. wt.
		Ecto parasite	- Spray Butox @ 2ml in 1 lit of water, twice a week at fortnightly interval.
		B.Q. and H.S.	- Vaccinate against B.Q. & H.S.
Poultry	All susceptible age groups	Ectoparasites	- Spray Butox over the flock @ 3ml in 1 lit of water once a week.
		Endoparasite	- Administer Albend @ 30 ml/100 birds in drinking water accompanied with Brotone liquid @ 5-10 ml/ 100 birds.
		<i>Coccidiosis</i>	- Administer <i>Coximar</i> (@ 1g/lit of drinking water) for 7 days.
Fisheries			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Grow-out	Pond water	Manuring using raw cow dung (RCD) @ 10,000 kg/ha (in ten splits) after every 30 days must be done. Well balanced fortified feed with vitamins and minerals should be provided @ 3-5% body weight per day in 2-3 splits. 8000-10,000 fingerlings/ha can be stocked.
	Nurseries		Apply agri-lime @250kg/ha in valley and 300kg in hills. Feeds should be provided 2-3 times a day @ 5-10 body weight per day. 20-30 million spawn can be stock in 1 ha pond for 15 days
Paddy cum fish culture	Water		Rice bran and mustard oil cake (1:1) can be provided as supplementary feed. Avoid insecticide/pesticide on crops.
Cat fish (Ngakra)	Pond and water		Water depth should be maintained at 0.5m -0.8m for nurseries
	Feed		Feed with high protein content 35-40% CP should be given @ 5-8% body weight.

I. Meghachandra Singh
Scientist i/c, IAAS



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MANIPUR BULLETIN

17th September, 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 18th to 22nd September, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (13th to 16th September, 2013)</u></p> <p>During the past four days the sky was partly cloudy upto 14th then mainly cloudy to cloudy thereafter. 34.5 mm rainfall was recorded during past four days. Maximum temperature range observed was 27.9 – 33.3 °C, range of minimum temperature observed was 19.6 – 21.7 °C, mean relative humidity observed in morning and afternoon were 92.0 % and 75.75 % respectively. The average wind speed range was 1.3 – 2.5 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Chandel (18th to 22nd September, 2013)</u></p> <p>It is likely to have no rains during next five days except on 21st with moderate rains. The sky may be partly cloudy to mainly cloudy but cloudy on 21st with maximum temp. of 26.0 - 30.0 °C and minimum temp. of 17.0 – 20.0 °C. The maximum RH may attain max of 99 % and minimum RH of 90 %. The average wind speed during next five days may be 2 km/hr.</p>
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Main Weather Observations: Kalpana1- Cloud imagery at 0530 hours IST shows convective clouds over parts of Manipur

Weather Forecast for next 3 days (upto 0830 hours IST of 20th September, 2013): Rain/thundershowers would occur at a few places over Manipur

Weather Outlook for subsequent 4 days from 20th September to 24th September, 2013: Rain/thundershower would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
Field Crops			
* Sprayers used to spray weedicide must not be used for spraying of insecticides or pesticides. Insecticides and pesticides must not be combined while spraying. Farmers are advised to add stickers @ 5ml/ pump.			
Rice	Panicle initiation to flowering (for normal sowing)		- Weed out and top dress with remaining urea dose @ 33 Kg/ ha after 45 days of transplanting. Fertilizer must be applied after proper draining and weeding. Water should be maintained at 5cm level upto dough stage.
	Tillering to panicle initiation (for late sowing)		- Weeding must be done before flowering stage. - Weed out at 25-30 days after transplanting. Drain out the water and apply 33kg of Urea as top dress.
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Soybean	Flowering to pod formation	Hairy caterpillars Rust	- Weeding may be done. - Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) on dry days. - Bayleton @ 10g/ 15 ml of water.
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