



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



**“Integrated Agromet Advisory Services”**

**MANIPUR BULLETIN**

**7<sup>th</sup> June, 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 8<sup>th</sup> to 12<sup>th</sup> June, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (4<sup>th</sup> to 6<sup>th</sup> June, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 4<sup>th</sup> June. 1.4 mm rainfall was recorded during past three days. Maximum temperature range observed was 30.3 – 31.7 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 87.3 and 68.0 % respectively. The average wind speed range was 2.0 – 2.6 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Bishnupur (8<sup>th</sup> to 12<sup>th</sup> June, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 28.0 - 31.0 °C and minimum temp. of 19.0 – 21.0 °C. The maximum RH is likely to attain max of 99 % and minimum RH of 80 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
---	---

**Monsoon Watch**

Conditions are favourable for further advance of south west monsoon in some parts of north eastern states during next 48hrs

**Main Weather Observation**

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

**Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> June, 2013)**

Rain/thundershowers would occur at many places over northeastern states

**Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> June, 2013**

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	(Pre-kharif) Grain filling		- Maintain water depth of 5-8 cm.
	(Kharif) Nursery		- Maintain water level just to submerge soil and expose green sprouts. - Land may be ploughed and puddle thoroughly for transplanting.
<b>Maize</b>	Cob formation (Summer maize)		- Weeding may be done. - Maintain proper drainage system to avoid water logging in and around the crop field.
	Cob maturity to harvesting (Rabi maize)		Harvest crops for cobs. For seeds, harvest if the colour of silk turns black and it must be dried to 13-14% moisture content for storage. Store the seeds along with 2-3 layers of sheaths.
<b>Soybean / Groundnut</b>	Early vegetative		- Surrounding area must be kept clean to avoid leaf eating caterpillars/ insects.
<b>Blackgram</b>	Sowing		- Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling. Treat the seed with Thiram or Captan.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Ginger/ Turmeric</b>	Vegetative		- Maintain proper drainage system to avoid water logging in and around the crop field. - Weeding as well as earthing up may be done. - Crops planted in the month of March may be top dressed with 25kg DAP + 10 Kg MOP/ sangam in upland areas.



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



**“Integrated Agromet Advisory Services”**

<b>Cowpea</b>	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For season recommended varieties are- Pusa Barsati, Pusa Do- fasli & Long green.
<b>Colocasia</b>	Vegetative		Earthing up may be done for 1 or 1 ½ month old plants and for late crops it may be done just after sprouting and weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 25 kg DAP/ sangam. - As a prophylactic measure against leaf blight spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
<b>Fruit plants like Orange, Lime, Lemon, Litchi, etc./ Tree bean</b>	Preparation of pit for planting		- Prepare the pit of size 2x2x2 ft for planting of these fruit plants. Use FYM and before planting, soil drenching should be done to protect from soil borne diseases. Use healthy planting material.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Pig</b>	Above 3 months of age	- Swine Fever  - FMD	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Vitamin supplement should be administered like Feroliv @ 20ml twice daily.
<b>Goat</b>	All age groups except three months or below	- Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	- FMD - Fascioliosis	- Vaccinate all the susceptible animals against the FMD. - Give Tolzan-F 90ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. - Apply Butox @ 3ml/lit of water while brushing the animals. - Mineral mixture along with Calcium preparation like Osteovet for milch animals should be administered.
<b>Poultry</b>	All susceptible age groups	<b>Coccidiosis</b>	- 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.
		<b>Pox</b>	- Vaccinate against pox.
		<b>Management</b>	- To prevent protozoan, bacterial, fungal diseases, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material.

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**

**7<sup>th</sup> June, 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 8<sup>th</sup> to 12<sup>th</sup> June, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (4<sup>th</sup> to 6<sup>th</sup> June, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 4<sup>th</sup> June. 1.4 mm rainfall was recorded during past three days. Maximum temperature range observed was 30.3 – 31.7 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 87.3 and 68.0 % respectively. The average wind speed range was 2.0 – 2.6 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Chandel (8<sup>th</sup> to 12<sup>th</sup> June, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 29.0 - 33.0 °C and minimum temp. of 21.0 – 24.0 °C. The maximum RH is likely to attain max of 99 % and minimum RH of 80 %. The average wind speed during next five days may reach upto max. value of 5 km/hr.</p>
---	---

**Monsoon Watch**

Conditions are favourable for further advance of south west monsoon in some parts of north eastern states during next 48hrs

**Main Weather Observation**

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

**Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> June, 2013)**

Rain/thundershowers would occur at many places over northeastern states

**Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> June, 2013**

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	(Pre-kharif) Grain filling		- Maintain water depth of 5-8 cm.
	(Kharif) Nursery		- Maintain water level just to submerge soil and expose green sprouts. - Land may be ploughed and puddle thoroughly for transplanting.
<b>Maize</b>	Cob formation (Summer maize)		- Weeding may be done. - Maintain proper drainage system to avoid water logging in and around the crop field.
	Cob maturity to harvesting (Rabi maize)		Harvest crops for cobs. For seeds, harvest if the colour of silk turns black and it must be dried to 13-14% moisture content for storage. Store the seeds along with 2-3 layers of sheaths.
<b>Soybean / Groundnut</b>	Early vegetative		- Surrounding area must be kept clean to avoid leaf eating caterpillars/ insects.
<b>Blackgram</b>	Sowing		- Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling. Treat the seed with Thiram or Captan.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Ginger/ Turmeric</b>	Vegetative		- Maintain proper drainage system to avoid water logging in and around the crop field. - Weeding as well as earthing up may be done. - Crops planted in the month of March may be top dressed with 25kg DAP + 10 Kg MOP/ sangam in upland areas.



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



**“Integrated Agromet Advisory Services”**

<b>Cowpea</b>	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For season recommended varieties are- Pusa Barsati, Pusa Do- fasli & Long green.
<b>Colocasia</b>	Vegetative		Earthing up may be done for 1 or 1 ½ month old plants and for late crops it may be done just after sprouting and weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 25 kg DAP/ sangam. - As a prophylactic measure against leaf blight spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
<b>Fruit plants like Orange, Lime, Lemon, Litchi, etc./ Tree bean</b>	Preparation of pit for planting		- Prepare the pit of size 2x2x2 ft for planting of these fruit plants. Use FYM and before planting, soil drenching should be done to protect from soil borne diseases. Use healthy planting material.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Pig</b>	Above 3 months of age	- Swine Fever  - FMD	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Vitamin supplement should be administered like Feroliv @ 20ml twice daily.
<b>Goat</b>	All age groups except three months or below	- Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	- FMD - Fascioliosis	- Vaccinate all the susceptible animals against the FMD. - Give Tolzan-F 90ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. - Apply Butox @3ml/lit of water while brushing the animals. - Mineral mixture along with Calcium preparation like Osteovet for milch animals should be administered.
<b>Poultry</b>	All susceptible age groups	<b>Coccidiosis</b>	- 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.
		<b>Pox</b>	- Vaccinate against pox.
		<b>Management</b>	- To prevent protozoan, bacterial, fungal diseases, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material.

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**

**7<sup>th</sup> June, 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 8<sup>th</sup> to 12<sup>th</sup> June, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (4<sup>th</sup> to 6<sup>th</sup> June, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 4<sup>th</sup> June. 1.4 mm rainfall was recorded during past three days. Maximum temperature range observed was 30.3 – 31.7 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 87.3 and 68.0 % respectively. The average wind speed range was 2.0 – 2.6 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Churachandpur (8<sup>th</sup> to 12<sup>th</sup> June, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 29.0 - 32.0 °C and minimum temp. of 20.0 – 22.0 °C. The maximum RH is likely to attain max of 99 % and minimum RH of 86 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
---	---

**Monsoon Watch**

Conditions are favourable for further advance of south west monsoon in some parts of north eastern states during next 48hrs

**Main Weather Observation**

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

**Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> June, 2013)**

Rain/thundershowers would occur at many places over northeastern states

**Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> June, 2013**

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	(Pre-kharif) Grain filling		- Maintain water depth of 5-8 cm.
	(Kharif) Nursery		- Maintain water level just to submerge soil and expose green sprouts. - Land may be ploughed and puddle thoroughly for transplanting.
<b>Maize</b>	Cob formation (Summer maize)		- Weeding may be done. - Maintain proper drainage system to avoid water logging in and around the crop field.
	Cob maturity to harvesting (Rabi maize)		Harvest crops for cobs. For seeds, harvest if the colour of silk turns black and it must be dried to 13-14% moisture content for storage. Store the seeds along with 2-3 layers of sheaths.
<b>Soybean / Groundnut</b>	Early vegetative		- Surrounding area must be kept clean to avoid leaf eating caterpillars/ insects.
<b>Blackgram</b>	Sowing		- Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling. Treat the seed with Thiram or Captan.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Ginger/ Turmeric</b>	Vegetative		- Maintain proper drainage system to avoid water logging in and around the crop field. - Weeding as well as earthing up may be done. - Crops planted in the month of March may be top dressed with 25kg DAP + 10 Kg MOP/ sangam in upland areas.



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



**“Integrated Agromet Advisory Services”**

<b>Cowpea</b>	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For season recommended varieties are- Pusa Barsati, Pusa Do- fasli & Long green.
<b>Colocasia</b>	Vegetative		Earthing up may be done for 1 or 1 ½ month old plants and for late crops it may be done just after sprouting and weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 25 kg DAP/ sangam. - As a prophylactic measure against leaf blight spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
<b>Fruit plants like Orange, Lime, Lemon, Litchi, etc./ Tree bean</b>	Preparation of pit for planting		- Prepare the pit of size 2x2x2 ft for planting of these fruit plants. Use FYM and before planting, soil drenching should be done to protect from soil borne diseases. Use healthy planting material.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Pig</b>	Above 3 months of age	- Swine Fever  - FMD	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Vitamin supplement should be administered like Feroliv @ 20ml twice daily.
<b>Goat</b>	All age groups except three months or below	- Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	- FMD - Fascioliosis	- Vaccinate all the susceptible animals against the FMD. - Give Tolzan-F 90ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. - Apply Butox @ 3ml/lit of water while brushing the animals. - Mineral mixture along with Calcium preparation like Osteovet for milch animals should be administered.
<b>Poultry</b>	All susceptible age groups	<b>Coccidiosis</b>	- 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.
		<b>Pox</b>	- Vaccinate against pox.
		<b>Management</b>	- To prevent protozoan, bacterial, fungal diseases, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material.

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**

**7<sup>th</sup> June, 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 8<sup>th</sup> to 12<sup>th</sup> June, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (4<sup>th</sup> to 6<sup>th</sup> June, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 4<sup>th</sup> June. 1.4 mm rainfall was recorded during past three days. Maximum temperature range observed was 30.3 – 31.7 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 87.3 and 68.0 % respectively. The average wind speed range was 2.0 – 2.6 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Imphal - East (8<sup>th</sup> to 12<sup>th</sup> June, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 27.0 - 31.0 °C and minimum temp. of 18.0 – 21.0 °C. The maximum RH is likely to attain max of 99 % and minimum RH of 74 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
---	---

**Monsoon Watch**

Conditions are favourable for further advance of south west monsoon in some parts of north eastern states during next 48hrs

**Main Weather Observation**

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

**Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> June, 2013)**

Rain/thundershowers would occur at many places over northeastern states

**Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> June, 2013**

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	(Pre-kharif) Grain filling		- Maintain water depth of 5-8 cm.
	(Kharif) Nursery		- Maintain water level just to submerge soil and expose green sprouts. - Land may be ploughed and puddle thoroughly for transplanting.
<b>Maize</b>	Cob formation (Summer maize)		- Weeding may be done. - Maintain proper drainage system to avoid water logging in and around the crop field.
	Cob maturity to harvesting (Rabi maize)		Harvest crops for cobs. For seeds, harvest if the colour of silk turns black and it must be dried to 13-14% moisture content for storage. Store the seeds along with 2-3 layers of sheaths.
<b>Soybean / Groundnut</b>	Early vegetative		- Surrounding area must be kept clean to avoid leaf eating caterpillars/ insects.
<b>Blackgram</b>	Sowing		- Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling. Treat the seed with Thiram or Captan.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Ginger/ Turmeric</b>	Vegetative		- Maintain proper drainage system to avoid water logging in and around the crop field. - Weeding as well as earthing up may be done. - Crops planted in the month of March may be top dressed with 25kg DAP + 10 Kg MOP/ sangam in upland areas.



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



**“Integrated Agromet Advisory Services”**

<b>Cowpea</b>	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For season recommended varieties are- Pusa Barsati, Pusa Do- fasli & Long green.
<b>Colocasia</b>	Vegetative		Earthing up may be done for 1 or 1 ½ month old plants and for late crops it may be done just after sprouting and weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 25 kg DAP/ sangam. - As a prophylactic measure against leaf blight spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
<b>Fruit plants like Orange, Lime, Lemon, Litchi, etc./ Tree bean</b>	Preparation of pit for planting		- Prepare the pit of size 2x2x2 ft for planting of these fruit plants. Use FYM and before planting, soil drenching should be done to protect from soil borne diseases. Use healthy planting material.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Pig</b>	Above 3 months of age	- Swine Fever  - FMD	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Vitamin supplement should be administered like Feroliv @ 20ml twice daily.
<b>Goat</b>	All age groups except three months or below	- Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	- FMD - Fascioliosis	- Vaccinate all the susceptible animals against the FMD. - Give Tolzan-F 90ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. - Apply Butox @3ml/lit of water while brushing the animals. - Mineral mixture along with Calcium preparation like Osteovet for milch animals should be administered.
<b>Poultry</b>	All susceptible age groups	<b>Coccidiosis</b>	- 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.
		<b>Pox</b>	- Vaccinate against pox.
		<b>Management</b>	- To prevent protozoan, bacterial, fungal diseases, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material.

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**

**7<sup>th</sup> June, 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 8<sup>th</sup> to 12<sup>th</sup> June, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (4<sup>th</sup> to 6<sup>th</sup> June, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 4<sup>th</sup> June. 1.4 mm rainfall was recorded during past three days. Maximum temperature range observed was 30.3 – 31.7 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 87.3 and 68.0 % respectively. The average wind speed range was 2.0 – 2.6 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Imphal - West (8<sup>th</sup> to 12<sup>th</sup> June, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 28.0 - 31.0 °C and minimum temp. of 19.0 – 22.0 °C. The maximum RH is likely to attain max of 99 % and minimum RH of 73 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
---	---

**Monsoon Watch**

Conditions are favourable for further advance of south west monsoon in some parts of north eastern states during next 48hrs

**Main Weather Observation**

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

**Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> June, 2013)**

Rain/thundershowers would occur at many places over northeastern states

**Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> June, 2013**

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	(Pre-kharif) Grain filling		- Maintain water depth of 5-8 cm.
	(Kharif) Nursery		- Maintain water level just to submerge soil and expose green sprouts. - Land may be ploughed and puddle thoroughly for transplanting.
<b>Maize</b>	Cob formation (Summer maize)		- Weeding may be done. - Maintain proper drainage system to avoid water logging in and around the crop field.
	Cob maturity to harvesting (Rabi maize)		Harvest crops for cobs. For seeds, harvest if the colour of silk turns black and it must be dried to 13-14% moisture content for storage. Store the seeds along with 2-3 layers of sheaths.
<b>Soybean / Groundnut</b>	Early vegetative		- Surrounding area must be kept clean to avoid leaf eating caterpillars/ insects.
<b>Blackgram</b>	Sowing		- Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling. Treat the seed with Thiram or Captan.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Ginger/ Turmeric</b>	Vegetative		- Maintain proper drainage system to avoid water logging in and around the crop field. - Weeding as well as earthing up may be done. - Crops planted in the month of March may be top dressed with 25kg DAP + 10 Kg MOP/ sangam in upland areas.



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



**“Integrated Agromet Advisory Services”**

<b>Cowpea</b>	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For season recommended varieties are- Pusa Barsati, Pusa Do- fasli & Long green.
<b>Colocasia</b>	Vegetative		Earthing up may be done for 1 or 1 ½ month old plants and for late crops it may be done just after sprouting and weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 25 kg DAP/ sangam. - As a prophylactic measure against leaf blight spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
<b>Fruit plants like Orange, Lime, Lemon, Litchi, etc./ Tree bean</b>	Preparation of pit for planting		- Prepare the pit of size 2x2x2 ft for planting of these fruit plants. Use FYM and before planting, soil drenching should be done to protect from soil borne diseases. Use healthy planting material.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Pig</b>	Above 3 months of age	- Swine Fever  - FMD	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Vitamin supplement should be administered like Feroliv @ 20ml twice daily.
<b>Goat</b>	All age groups except three months or below	- Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	- FMD - Fascioliosis	- Vaccinate all the susceptible animals against the FMD. - Give Tolzan-F 90ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. - Apply Butox @3ml/lit of water while brushing the animals. - Mineral mixture along with Calcium preparation like Osteovet for milch animals should be administered.
<b>Poultry</b>	All susceptible age groups	<b>Coccidiosis</b>	- 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.
		<b>Pox</b>	- Vaccinate against pox.
		<b>Management</b>	- To prevent protozoan, bacterial, fungal diseases, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material.

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**

**7<sup>th</sup> June, 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 8<sup>th</sup> to 12<sup>th</sup> June, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (4<sup>th</sup> to 6<sup>th</sup> June, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 4<sup>th</sup> June. 1.4 mm rainfall was recorded during past three days. Maximum temperature range observed was 30.3 – 31.7 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 87.3 and 68.0 % respectively. The average wind speed range was 2.0 – 2.6 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Senapati (8<sup>th</sup> to 12<sup>th</sup> June, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 26.0 - 30.0 °C and minimum temp. of 18.0 – 20.0 °C. The maximum RH is likely to attain max of 98 % and minimum RH of 73 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
---	--

**Monsoon Watch**

Conditions are favourable for further advance of south west monsoon in some parts of north eastern states during next 48hrs

**Main Weather Observation**

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

**Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> June, 2013)**

Rain/thundershowers would occur at many places over northeastern states

**Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> June, 2013**

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	(Pre-kharif) Grain filling		- Maintain water depth of 5-8 cm.
	(Kharif) Nursery		- Maintain water level just to submerge soil and expose green sprouts. - Land may be ploughed and puddle thoroughly for transplanting.
<b>Maize</b>	Cob formation (Summer maize)		- Weeding may be done. - Maintain proper drainage system to avoid water logging in and around the crop field.
	Cob maturity to harvesting (Rabi maize)		Harvest crops for cobs. For seeds, harvest if the colour of silk turns black and it must be dried to 13-14% moisture content for storage. Store the seeds along with 2-3 layers of sheaths.
<b>Soybean / Groundnut</b>	Early vegetative		- Surrounding area must be kept clean to avoid leaf eating caterpillars/ insects.
<b>Blackgram</b>	Sowing		- Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling. Treat the seed with Thiram or Captan.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Ginger/ Turmeric</b>	Vegetative		- Maintain proper drainage system to avoid water logging in and around the crop field. - Weeding as well as earthing up may be done. - Crops planted in the month of March may be top dressed with 25kg DAP + 10 Kg MOP/ sangam in upland areas.



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



**“Integrated Agromet Advisory Services”**

<b>Cowpea</b>	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For season recommended varieties are- Pusa Barsati, Pusa Do- fasli & Long green.
<b>Colocasia</b>	Vegetative		Earthing up may be done for 1 or 1 ½ month old plants and for late crops it may be done just after sprouting and weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 25 kg DAP/ sangam. - As a prophylactic measure against leaf blight spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
<b>Fruit plants like Orange, Lime, Lemon, Litchi, etc./ Tree bean</b>	Preparation of pit for planting		- Prepare the pit of size 2x2x2 ft for planting of these fruit plants. Use FYM and before planting, soil drenching should be done to protect from soil borne diseases. Use healthy planting material.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Pig</b>	Above 3 months of age	- Swine Fever  - FMD	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Vitamin supplement should be administered like Feroliv @ 20ml twice daily.
<b>Goat</b>	All age groups except three months or below	- Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	- FMD - Fascioliosis	- Vaccinate all the susceptible animals against the FMD. - Give Tolzan-F 90ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. - Apply Butox @ 3ml/lit of water while brushing the animals. - Mineral mixture along with Calcium preparation like Osteovet for milch animals should be administered.
<b>Poultry</b>	All susceptible age groups	<b>Coccidiosis</b>	- 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.
		<b>Pox</b>	- Vaccinate against pox.
		<b>Management</b>	- To prevent protozoan, bacterial, fungal diseases, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material.

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**

**7<sup>th</sup> June, 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 8<sup>th</sup> to 12<sup>th</sup> June, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (4<sup>th</sup> to 6<sup>th</sup> June, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 4<sup>th</sup> June. 1.4 mm rainfall was recorded during past three days. Maximum temperature range observed was 30.3 – 31.7 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 87.3 and 68.0 % respectively. The average wind speed range was 2.0 – 2.6 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Tamenglong (8<sup>th</sup> to 12<sup>th</sup> June, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 28.0 - 32.0 °C and minimum temp. of 21.0 – 22.0 °C. The maximum RH is likely to attain max of 99 % and minimum RH of 76 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
---	--

**Monsoon Watch**

Conditions are favourable for further advance of south west monsoon in some parts of north eastern states during next 48hrs

**Main Weather Observation**

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

**Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> June, 2013)**

Rain/thundershowers would occur at many places over northeastern states

**Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> June, 2013**

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	(Pre-kharif) Grain filling		- Maintain water depth of 5-8 cm.
	(Kharif) Nursery		- Maintain water level just to submerge soil and expose green sprouts. - Land may be ploughed and puddle thoroughly for transplanting.
<b>Maize</b>	Cob formation (Summer maize)		- Weeding may be done. - Maintain proper drainage system to avoid water logging in and around the crop field.
	Cob maturity to harvesting (Rabi maize)		Harvest crops for cobs. For seeds, harvest if the colour of silk turns black and it must be dried to 13-14% moisture content for storage. Store the seeds along with 2-3 layers of sheaths.
<b>Soybean / Groundnut</b>	Early vegetative		- Surrounding area must be kept clean to avoid leaf eating caterpillars/ insects.
<b>Blackgram</b>	Sowing		- Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling. Treat the seed with Thiram or Captan.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Ginger/ Turmeric</b>	Vegetative		- Maintain proper drainage system to avoid water logging in and around the crop field. - Weeding as well as earthing up may be done. - Crops planted in the month of March may be top dressed with 25kg DAP + 10 Kg MOP/ sangam in upland areas.



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



**“Integrated Agromet Advisory Services”**

<b>Cowpea</b>	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For season recommended varieties are- Pusa Barsati, Pusa Do- fasli & Long green.
<b>Colocasia</b>	Vegetative		Earthing up may be done for 1 or 1 ½ month old plants and for late crops it may be done just after sprouting and weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 25 kg DAP/ sangam. - As a prophylactic measure against leaf blight spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
<b>Fruit plants like Orange, Lime, Lemon, Litchi, etc./ Tree bean</b>	Preparation of pit for planting		- Prepare the pit of size 2x2x2 ft for planting of these fruit plants. Use FYM and before planting, soil drenching should be done to protect from soil borne diseases. Use healthy planting material.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Pig</b>	Above 3 months of age	- Swine Fever  - FMD	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Vitamin supplement should be administered like Feroliv @ 20ml twice daily.
<b>Goat</b>	All age groups except three months or below	- Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	- FMD - Fascioliosis	- Vaccinate all the susceptible animals against the FMD. - Give Tolzan-F 90ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. - Apply Butox @3ml/lit of water while brushing the animals. - Mineral mixture along with Calcium preparation like Osteovet for milch animals should be administered.
<b>Poultry</b>	All susceptible age groups	<b>Coccidiosis</b>	- 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.
		<b>Pox</b>	- Vaccinate against pox.
		<b>Management</b>	- To prevent protozoan, bacterial, fungal diseases, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material.

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**

**7<sup>th</sup> June, 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 8<sup>th</sup> to 12<sup>th</sup> June, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (4<sup>th</sup> to 6<sup>th</sup> June, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 4<sup>th</sup> June. 1.4 mm rainfall was recorded during past three days. Maximum temperature range observed was 30.3 – 31.7 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 87.3 and 68.0 % respectively. The average wind speed range was 2.0 – 2.6 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Thoubal (8<sup>th</sup> to 12<sup>th</sup> June, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 27.0 - 30.0 °C and minimum temp. of 18.0 – 20.0 °C. The maximum RH is likely to attain max of 99 % and minimum RH of 79 %. The average wind speed during next five days may reach upto max. value of 4 km/hr.</p>
---	---

**Monsoon Watch**

Conditions are favourable for further advance of south west monsoon in some parts of north eastern states during next 48hrs

**Main Weather Observation**

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

**Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> June, 2013)**

Rain/thundershowers would occur at many places over northeastern states

**Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> June, 2013**

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	(Pre-kharif) Grain filling		- Maintain water depth of 5-8 cm.
	(Kharif) Nursery		- Maintain water level just to submerge soil and expose green sprouts. - Land may be ploughed and puddle thoroughly for transplanting.
<b>Maize</b>	Cob formation (Summer maize)		- Weeding may be done. - Maintain proper drainage system to avoid water logging in and around the crop field.
	Cob maturity to harvesting (Rabi maize)		Harvest crops for cobs. For seeds, harvest if the colour of silk turns black and it must be dried to 13-14% moisture content for storage. Store the seeds along with 2-3 layers of sheaths.
<b>Soybean / Groundnut</b>	Early vegetative		- Surrounding area must be kept clean to avoid leaf eating caterpillars/ insects.
<b>Blackgram</b>	Sowing		- Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling. Treat the seed with Thiram or Captan.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Ginger/ Turmeric</b>	Vegetative		- Maintain proper drainage system to avoid water logging in and around the crop field. - Weeding as well as earthing up may be done. - Crops planted in the month of March may be top dressed with 25kg DAP + 10 Kg MOP/ sangam in upland areas.



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



**“Integrated Agromet Advisory Services”**

<b>Cowpea</b>	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For season recommended varieties are- Pusa Barsati, Pusa Do- fasli & Long green.
<b>Colocasia</b>	Vegetative		Earthing up may be done for 1 or 1 ½ month old plants and for late crops it may be done just after sprouting and weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 25 kg DAP/ sangam. - As a prophylactic measure against leaf blight spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
<b>Fruit plants like Orange, Lime, Lemon, Litchi, etc./ Tree bean</b>	Preparation of pit for planting		- Prepare the pit of size 2x2x2 ft for planting of these fruit plants. Use FYM and before planting, soil drenching should be done to protect from soil borne diseases. Use healthy planting material.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Pig</b>	Above 3 months of age	- Swine Fever  - FMD	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Vitamin supplement should be administered like Feroliv @ 20ml twice daily.
<b>Goat</b>	All age groups except three months or below	- Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	- FMD - Fascioliosis	- Vaccinate all the susceptible animals against the FMD. - Give Tolzan-F 90ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. - Apply Butox @ 3ml/lit of water while brushing the animals. - Mineral mixture along with Calcium preparation like Osteovet for milch animals should be administered.
<b>Poultry</b>	All susceptible age groups	<b>Coccidiosis</b>	- 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.
		<b>Pox</b>	- Vaccinate against pox.
		<b>Management</b>	- To prevent protozoan, bacterial, fungal diseases, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material.

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**

**7<sup>th</sup> June, 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 8<sup>th</sup> to 12<sup>th</sup> June, 2013 as given below:

<p align="center"><u>Significant past weather for the preceding bi-weekly of Imphal - West (4<sup>th</sup> to 6<sup>th</sup> June, 2013)</u></p> <p>During the past three days the sky was mainly cloudy to cloudy but partly cloudy during morning hours of 4<sup>th</sup> June. 1.4 mm rainfall was recorded during past three days. Maximum temperature range observed was 30.3 – 31.7 °C, range of minimum temperature observed was 22.0 – 23.0 °C, mean relative humidity observed in morning and afternoon were 87.3 and 68.0 % respectively. The average wind speed range was 2.0 – 2.6 km/hr.</p>	<p align="center"><u>Weather forecast for next five days of Ukhrul (8<sup>th</sup> to 12<sup>th</sup> June, 2013)</u></p> <p>It is likely to have light to moderate rains during next five days. The sky is likely to be mainly cloudy to cloudy with maximum temp. of 26.0 - 29.0 °C and minimum temp. of 17.0 – 20.0 °C. The maximum RH is likely to attain max of 98 % and minimum RH of 80 %. The average wind speed during next five days may reach upto max. value of 3 km/hr.</p>
---	--

**Monsoon Watch**

Conditions are favourable for further advance of south west monsoon in some parts of north eastern states during next 48hrs

**Main Weather Observation**

Kalpana 1Cloud Imagery at 0530 hrs IST shows convective clouds over some parts of Manipur

**Weather Forecast for next 3 days (upto 0830 hours IST of 10<sup>th</sup> June, 2013)**

Rain/thundershowers would occur at many places over northeastern states

**Weather Outlook for subsequent 4 days from 10<sup>th</sup> to 14<sup>th</sup> June, 2013**

Rain/thundershowers would occur at many places over northeastern states

Name of the crop	Stage	Pest and disease infestation	Agro-meteorological advisories
<b>Field Crops</b>			
<b>Rice</b>	(Pre-kharif) Grain filling		- Maintain water depth of 5-8 cm.
	(Kharif) Nursery		- Maintain water level just to submerge soil and expose green sprouts. - Land may be ploughed and puddle thoroughly for transplanting.
<b>Maize</b>	Cob formation (Summer maize)		- Weeding may be done. - Maintain proper drainage system to avoid water logging in and around the crop field.
	Cob maturity to harvesting (Rabi maize)		Harvest crops for cobs. For seeds, harvest if the colour of silk turns black and it must be dried to 13-14% moisture content for storage. Store the seeds along with 2-3 layers of sheaths.
<b>Soybean / Groundnut</b>	Early vegetative		- Surrounding area must be kept clean to avoid leaf eating caterpillars/ insects.
<b>Blackgram</b>	Sowing		- Seed rate is 10-15 kg/ ha. Sowing may be done by broadcasting or dibbling. Treat the seed with Thiram or Captan.
<b>Storage</b>			- Clean and store the seeds in RC-seed bins after proper drying. Check for germination of seeds or fungal growth.
<b>Horticulture Crops</b>			
<b>Ginger/ Turmeric</b>	Vegetative		- Maintain proper drainage system to avoid water logging in and around the crop field. - Weeding as well as earthing up may be done. - Crops planted in the month of March may be top dressed with 25kg DAP + 10 Kg MOP/ sangam in upland areas.



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



**“Integrated Agromet Advisory Services”**

<b>Cowpea</b>	Sowing		Seeds may be sown in prepared land keeping space of 10-15cm between seeds and 45-60 cm between rows. For season recommended varieties are- Pusa Barsati, Pusa Do- fasli & Long green.
<b>Colocasia</b>	Vegetative		Earthing up may be done for 1 or 1 ½ month old plants and for late crops it may be done just after sprouting and weeding after 1 or 1 ½ month. - 45-50 days old plants may be top dressed with 25 kg DAP/ sangam. - As a prophylactic measure against leaf blight spray Redomil @ 1.5g/litre of water or Mancozeb @ 2gm/lit of water twice or thrice at 10 days interval after this wet spell.
<b>Fruit plants like Orange, Lime, Lemon, Litchi, etc./ Tree bean</b>	Preparation of pit for planting		- Prepare the pit of size 2x2x2 ft for planting of these fruit plants. Use FYM and before planting, soil drenching should be done to protect from soil borne diseases. Use healthy planting material.
<b>Animal Sciences</b>			
<b>Name of the animal</b>	<b>Growth stage</b>	<b>Disease/ infestation</b>	<b>Agro-meteorological advisories</b>
<b>Pig</b>	Above 3 months of age	- Swine Fever  - FMD	- Vaccinate with <i>Swine Fever</i> vaccine as per prescribed dose but de-worm using Panacur tab @ 1.5mg/10kg body weight before vaccination. Don't use Korean strain vaccine. - Vaccinate all the susceptible animals against the FMD. - Vitamin supplement should be administered like Feroliv @ 20ml twice daily.
<b>Goat</b>	All age groups except three months or below	- Fascioliosis	- Give Tolzan-F 15ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
<b>Cattle / Buffalo/ Mithun</b>	All age groups except three months or below	- FMD - Fascioliosis	- Vaccinate all the susceptible animals against the FMD. - Give Tolzan-F 90ml orally/ 300kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily. - Apply Butox @3ml/lit of water while brushing the animals. - Mineral mixture along with Calcium preparation like Osteovet for milch animals should be administered.
<b>Poultry</b>	All susceptible age groups	<b>Coccidiosis</b>	- 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.
		<b>Pox</b>	- Vaccinate against pox.
		<b>Management</b>	- To prevent protozoan, bacterial, fungal diseases, litter should be kept dry and turned regularly. Apply lime powder @ 2.5 kg per 100 sq. ft. area in litter material.

I. Meghachandra Singh  
Scientist i/c, IAAS