



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

**MANIPUR BULLETIN****14th August, 2018****Bishnupur**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 15th to 19th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (10th to 13th August, 2018)

Observed **28.4 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.7 to 30.5 °C** and minimum of **22.6 to 22.7 °C** with mean relative humidity **92.3 %** max and **72.0 %** min was recorded in the past four days & average wind speed was **1.4 – 3.1km/ hr**.

Weather forecast for next five days of Bishnupur (15th to 19th August, 2018)

Likely to have moderate to heavy rains from Saturday and mainly cloudy to overcast sky with maximum temp. **32-33 °C** & minimum temp. **23-24 °C**. Relative humidity may reach upto **100 %** (max RH) & **75 %** (min RH). The average wind speed may be **2-4 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering to Panicle Initiation		<ul style="list-style-type: none"> - Maintain water level to 5-8cm and drain out excess water if accumulated due to rain. - Weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha. - Apply 16-24 kg of Carbofuran (3G)/ ha with first top dressing of fertilizer. - After top dressing, one/ two prophylactic spray(s) in sunny days with 300-400ml Phosphamidon (40% EC), 300g Carbendazim and 20g Streptocycline diluted in 400-500 litres of water.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
Soybean/ Groundnut	Flowering to pegging		<ul style="list-style-type: none"> - Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. - Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice Bean	Flowering to fruiting		<ul style="list-style-type: none"> - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		<p>For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.
King Chilli	Fruiting	Fruit rot and aphid	<ul style="list-style-type: none"> - Spray Redomil @ 2g/lit water or combination of Metalyx- M and Mancozeb a.i. then Imidacloprid @ 3ml/10lit of water.
Citrus		leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		Powdery mildew	Fungicide like <i>Carbendazim and sixer</i> must be applied as prophylactic measures. If powdery mildew is seen in the orchard, then <i>Bayleton</i> @7 g / 15 lit of water should be sprayed in the grown up trees.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.
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Animal Sciences

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

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

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovitide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p ^H of pond water should be maintained at 7.0-7.5. 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.
	Grow -out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @1500kg/ha. Maintained p ^H of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
		Feed	- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.

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



ICAR Research Complex for N.E.H. Region
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“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****14th August, 2018**Chandel

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 15th to 19th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (10th to 13th August, 2018)

Observed **28.4 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.7 to 30.5 °C** and minimum of **22.6 to 22.7 °C** with mean relative humidity **92.3 %** max and **72.0 %** min was recorded in the past four days & average wind speed was **1.4 – 3.1km/ hr**.

Weather forecast for next five days of Chandel (15th to 19th August, 2018)

Likely to have moderate to heavy rains from Saturday and mainly cloudy to overcast sky with maximum temp. **31-33 °C** & minimum temp. **22-23 °C**. Relative humidity may reach upto **100 % (max RH)** & **74 % (min RH)**. The average wind speed may be **2-4 km/hr**.

<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering to Panicle Initiation		<ul style="list-style-type: none"> - Maintain water level to 5-8cm and drain out excess water if accumulated due to rain. - Weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha. - Apply 16-24 kg of Carbofuran (3G)/ ha with first top dressing of fertilizer. - After top dressing, one/ two prophylactic spray(s) in sunny days with 300-400ml Phosphamidon (40% EC), 300g Carbendazim and 20g Streptocycline diluted in 400-500 litres of water.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
Soybean/ Groundnut	Flowering to pegging		<ul style="list-style-type: none"> - Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. - Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice Bean	Flowering to fruiting		<ul style="list-style-type: none"> - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		<p>For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>
<i>Horticulture Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.
King Chilli	Fruiting	Fruit rot and aphid	- Spray Redomil @ 2g/lit water or combination of Metalyx- M and Mancozeb a.i. then Imidacloprid @ 3ml/10lit of water.
Citrus		leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		Powdery mildew	Fungicide like Carbendazim and sixer must be applied as prophylactic measures. If powdery mildew is seen in the orchard, then Bayleton @7 g / 15 lit of water should be sprayed in the grown up trees.



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Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.
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Animal Sciences

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

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

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovitide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p ^H of pond water should be maintained at 7.0-7.5. 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.
	Grow -out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @1500kg/ha. Maintained p ^H of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
		Feed	- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.

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**MANIPUR BULLETIN****14th August, 2018****Churachandpur**

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Observed **28.4 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.7 to 30.5 °C** and minimum of **22.6 to 22.7 °C** with mean relative humidity **92.3 %** max and **72.0 %** min was recorded in the past four days & average wind speed was **1.4 – 3.1km/ hr**.

Weather forecast for next five days of Churachandpur (15th to 19th August, 2018)

Likely to have moderate to heavy rains from Saturday and mainly cloudy to overcast sky with maximum temp. **32-33 °C** & minimum temp. **23-24 °C**. Relative humidity may reach upto **100 % (max RH)** & **68 % (min RH)**. The average wind speed may be **2-3 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering to Panicle Initiation		<ul style="list-style-type: none"> - Maintain water level to 5-8cm and drain out excess water if accumulated due to rain. - Weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha. - Apply 16-24 kg of Carbofuran (3G)/ ha with first top dressing of fertilizer. - After top dressing, one/ two prophylactic spray(s) in sunny days with 300-400ml Phosphamidon (40% EC), 300g Carbendazim and 20g Streptocycline diluted in 400-500 litres of water.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
Soybean/ Groundnut	Flowering to pegging		<ul style="list-style-type: none"> - Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. - Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
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Blackgram/ Rice Bean	Flowering to fruiting		<ul style="list-style-type: none"> - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		<p>For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.
King Chilli	Fruiting	Fruit rot and aphid	- Spray Redomil @ 2g/lit water or combination of Metalyx- M and Mancozeb a.i. then Imidacloprid @ 3ml/10lit of water.
Citrus		leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		Powdery mildew	Fungicide like Carbendazim and sixer must be applied as prophylactic measures. If powdery mildew is seen in the orchard, then Bayleton @7 g / 15 lit of water should be sprayed in the grown up trees.



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“Gramin Krishi Mausam Seva”



Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.
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Animal Sciences

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Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
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		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
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Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
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Pig	All age groups except the young ones	• De-worming	• Deworming against Helminth parasites using Piperazine citrate @ 30 ml per adult animal once.
		• Ticks	• Add Butox liquid @ 2 ml/ lit of water and use the solution twice a week while brushing the animal.
		• Vaccination	• Vaccinate against FMD.
		• Management	• Give mineral mixture like Vimicon and Ascagold suspension in pregnant sow @ 20g and 20ml resp. in feed.
Cattle	All age groups excepts the young ones	• Vaccination	• Vaccinate against B.Q., F.M.D. & H.S. if not yet vaccinated.
		• Deworming	• De-worm with Albomac suspension@60-90ml for 300kg body weight or 20-30ml for 100 kg body weight.
		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovitide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p ^H of pond water should be maintained at 7.0-7.5. 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.
	Grow -out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @1500kg/ha. Maintained p ^H of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
		Feed	- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.

(I.Meghachandra Singh)

Scientist i/c, GKMS



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**MANIPUR BULLETIN****14th August, 2018****Imphal East**

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Weather forecast for next five days of Imphal East (15th to 19th August, 2018)

Likely to have moderate to heavy rains from Saturday and mainly cloudy to overcast sky with maximum temp. **32-33 °C** & minimum temp. **23-24 °C**. Relative humidity may reach upto **100 % (max RH)** & **66 % (min RH)**. The average wind speed may be **2-4 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering to Panicle Initiation		<ul style="list-style-type: none"> - Maintain water level to 5-8cm and drain out excess water if accumulated due to rain. - Weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha. - Apply 16-24 kg of Carbofuran (3G)/ ha with first top dressing of fertilizer. - After top dressing, one/ two prophylactic spray(s) in sunny days with 300-400ml Phosphamidon (40% EC), 300g Carbendazim and 20g Streptocycline diluted in 400-500 litres of water.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
Soybean/ Groundnut	Flowering to pegging		<ul style="list-style-type: none"> - Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. - Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice Bean	Flowering to fruiting		<ul style="list-style-type: none"> - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		<p>For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.
King Chilli	Fruiting	Fruit rot and aphid	<ul style="list-style-type: none"> - Spray Redomil @ 2g/lit water or combination of Metalyx- M and Mancozeb a.i. then Imidacloprid @ 3ml/10lit of water.
Citrus		leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		Powdery mildew	Fungicide like <i>Carbendazim</i> and <i>sixer</i> must be applied as prophylactic measures. If powdery mildew is seen in the orchard, then <i>Bayleton</i> @7 g / 15 lit of water should be sprayed in the grown up trees.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.
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Animal Sciences

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

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

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovitide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p ^H of pond water should be maintained at 7.0-7.5. 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.
	Grow -out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @1500kg/ha. Maintained p ^H of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
		Feed	- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.

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



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

**MANIPUR BULLETIN****14th August, 2018****Imphal West**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 15th to 19th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (10th to 13th August, 2018)

Observed **28.4 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.7 to 30.5 °C** and minimum of **22.6 to 22.7 °C** with mean relative humidity **92.3 %** max and **72.0 %** min was recorded in the past four days & average wind speed was **1.4 – 3.1km/ hr**.

Weather forecast for next five days of Imphal West (15th to 19th August, 2018)

Likely to have moderate to heavy rains from Saturday and mainly cloudy to overcast sky with maximum temp. **32-33 °C** & minimum temp. **23-24 °C**. Relative humidity may reach upto **100 % (max RH)** & **51 % (min RH)**. The average wind speed may be **0-4 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering to Panicle Initiation		<ul style="list-style-type: none"> - Maintain water level to 5-8cm and drain out excess water if accumulated due to rain. - Weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha. - Apply 16-24 kg of Carbofuran (3G)/ ha with first top dressing of fertilizer. - After top dressing, one/ two prophylactic spray(s) in sunny days with 300-400ml Phosphamidon (40% EC), 300g Carbendazim and 20g Streptocycline diluted in 400-500 litres of water.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
Soybean/ Groundnut	Flowering to pegging		<ul style="list-style-type: none"> - Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. - Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice Bean	Flowering to fruiting		<ul style="list-style-type: none"> - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		<p>For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.
King Chilli	Fruiting	Fruit rot and aphid	<ul style="list-style-type: none"> - Spray Redomil @ 2g/lit water or combination of Metalyx- M and Mancozeb a.i. then Imidacloprid @ 3ml/10lit of water.
Citrus		leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		Powdery mildew	Fungicide like Carbendazim and sixer must be applied as prophylactic measures. If powdery mildew is seen in the orchard, then Bayleton @7 g / 15 lit of water should be sprayed in the grown up trees.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.
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Animal Sciences

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

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

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovitide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p ^H of pond water should be maintained at 7.0-7.5. 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.
	Grow -out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @1500kg/ha. Maintained p ^H of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
		Feed	- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.

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



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

**MANIPUR BULLETIN****14th August, 2018**Senapati

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 15th to 19th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (10th to 13th August, 2018)

Observed **28.4 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.7 to 30.5 °C** and minimum of **22.6 to 22.7 °C** with mean relative humidity **92.3 %** max and **72.0 %** min was recorded in the past four days & average wind speed was **1.4 – 3.1 km/hr**.

Weather forecast for next five days of Senapati (15th to 19th August, 2018)

Likely to have moderate to heavy rains from Saturday and mainly cloudy to overcast sky with maximum temp. **31-32°C** & minimum temp. **21-22 °C**. Relative humidity may reach upto **100 %** (max RH) & **80 %** (min RH). The average wind speed may be **2-4 km/hr**.

<i>Field Crops</i>			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering to Panicle Initiation		<ul style="list-style-type: none"> - Maintain water level to 5-8cm and drain out excess water if accumulated due to rain. - Weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha. - Apply 16-24 kg of Carbofuran (3G)/ ha with first top dressing of fertilizer. - After top dressing, one/ two prophylactic spray(s) in sunny days with 300-400ml Phosphamidon (40% EC), 300g Carbendazim and 20g Streptocycline diluted in 400-500 litres of water.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
Soybean/ Groundnut	Flowering to pegging		<ul style="list-style-type: none"> - Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. - Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice Bean	Flowering to fruiting		<ul style="list-style-type: none"> - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		<p>For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>

Horticulture Crops

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
King Chilli	Fruiting	Fruit rot and aphid	- Spray Redomil @ 2g/lit water or combination of Metalyx- M and Mancozeb a.i. then Imidacloprid @ 3ml/10lit of water.
Citrus		leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		Powdery mildew	Fungicide like Carbendazim and sixer must be applied as prophylactic measures. If powdery mildew is seen in the orchard, then Bayleton @7 g / 15 lit of water should be sprayed in the grown up trees.
Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.

Animal Sciences

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

Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
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ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



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

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovotide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p ^H of pond water should be maintained at 7.0-7.5. 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.
	Grow -out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @1500kg/ha. Maintained p ^H of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
		Feed	- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.

(I.Meghachandra Singh)

Scientist i/c, GKMS



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

**MANIPUR BULLETIN****14th August, 2018****Tamenglong**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 15th to 19th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (10th to 13th August, 2018)

Observed **28.4 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.7 to 30.5 °C** and minimum of **22.6 to 22.7 °C** with mean relative humidity **92.3 %** max and **72.0 %** min was recorded in the past four days & average wind speed was **1.4 – 3.1km/ hr**.

Weather forecast for next five days of Tamenglong (15th to 19th August, 2018)

Likely to have moderate to heavy rains from Saturday and mainly cloudy to overcast sky with maximum temp. **31-32°C** & minimum temp. **21-22 °C**. Relative humidity may reach upto **100 %** (max RH) & **67 %** (min RH). The average wind speed may be **2-3 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering to Panicle Initiation		<ul style="list-style-type: none"> - Maintain water level to 5-8cm and drain out excess water if accumulated due to rain. - Weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha. - Apply 16-24 kg of Carbofuran (3G)/ ha with first top dressing of fertilizer. - After top dressing, one/ two prophylactic spray(s) in sunny days with 300-400ml Phosphamidon (40% EC), 300g Carbendazim and 20g Streptocycline diluted in 400-500 litres of water.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
Soybean/ Groundnut	Flowering to pegging		<ul style="list-style-type: none"> - Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. - Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice Bean	Flowering to fruiting		<ul style="list-style-type: none"> - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		<p>For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.
King Chilli	Fructing	Fruit rot and aphid	<ul style="list-style-type: none"> - Spray Redomil @ 2g/lit water or combination of Metalyx- M and Mancozeb a.i. then Imidacloprid @ 3ml/10lit of water.
Citrus		leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		Powdery mildew	Fungicide like Carbendazim and sixer must be applied as prophylactic measures. If powdery mildew is seen in the orchard, then Bayleton @7 g / 15 lit of water should be sprayed in the grown up trees.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.
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Animal Sciences

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

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

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovitide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p ^H of pond water should be maintained at 7.0-7.5. 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.
	Grow -out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @1500kg/ha. Maintained p ^H of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
		Feed	- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.

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



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

**MANIPUR BULLETIN****14th August, 2018****Thoubal**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 15th to 19th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (10th to 13th August, 2018)

Observed **28.4 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.7 to 30.5 °C** and minimum of **22.6 to 22.7 °C** with mean relative humidity **92.3 %** max and **72.0 %** min was recorded in the past four days & average wind speed was **1.4 – 3.1km/ hr**.

Weather forecast for next five days of Thoubal (15th to 19th August, 2018)

Likely to have moderate to heavy rains from Saturday and mainly cloudy to overcast sky with maximum temp. **32-33 °C** & minimum temp. **23-24 °C**. Relative humidity may reach upto **100 % (max RH)** & **74 % (min RH)**. The average wind speed may be **2-4 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering to Panicle Initiation		<ul style="list-style-type: none"> - Maintain water level to 5-8cm and drain out excess water if accumulated due to rain. - Weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha. - Apply 16-24 kg of Carbofuran (3G)/ ha with first top dressing of fertilizer. - After top dressing, one/ two prophylactic spray(s) in sunny days with 300-400ml Phosphamidon (40% EC), 300g Carbendazim and 20g Streptocycline diluted in 400-500 litres of water.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
Soybean/ Groundnut	Flowering to pegging		<ul style="list-style-type: none"> - Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. - Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
		Tikka disease	- Spray Carbendazim @ 0.5g / lit of water to control Tikka disease in groundnut.
Blackgram/ Rice Bean	Flowering to fruiting		<ul style="list-style-type: none"> - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		<p>For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Cauliflower	Vegetative stage of early crop and nursery of main crop	Whiptail	- The cauliflower plant before or at early curd formation stage, if the leaf margin turns white then reduce the dose of urea to be applied and apply 0.1% Ammonium Molybdate or Tracel @ 5g/ lit water.
		Soft rot	Spray Streptocycline @ 0.1mg/ lit water at 10-15 days interval at least twice or Carbendazim @ 1-2 mg/ lit water.
			- Raise main crop cauliflower nursery.
King Chilli	Fruiting	Fruit rot and aphid	<ul style="list-style-type: none"> - Spray Redomil @ 2g/lit water or combination of Metalyx- M and Mancozeb a.i. then Imidacloprid @ 3ml/10lit of water.
Citrus		leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		Powdery mildew	Fungicide like <i>Carbendazim</i> and <i>sixer</i> must be applied as prophylactic measures. If powdery mildew is seen in the orchard, then <i>Bayleton</i> @7 g / 15 lit of water should be sprayed in the grown up trees.



ICAR Research Complex for N.E.H. Region

Manipur Centre, Lamphelpat, Imphal - 795 004

“Gramin Krishi Mausam Seva”



Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.
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Animal Sciences

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

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

Fishery

* Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.

Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovitide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p ^H of pond water should be maintained at 7.0-7.5. 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.
	Grow -out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @1500kg/ha. Maintained p ^H of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
		Feed	- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.

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“Gramin Krishi Mausam Seva”

**MANIPUR BULLETIN****14th August, 2018****Ukhrul**

GKMS at AMFU- Lamphelpat, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and India Meteorological Department, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 15th to 19th August, 2018 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (10th to 13th August, 2018)

Observed **28.4 mm** rainfall with **mainly cloudy to overcast sky**. Maximum temperature recorded ranged from **28.7 to 30.5 °C** and minimum of **22.6 to 22.7 °C** with mean relative humidity **92.3 %** max and **72.0 %** min was recorded in the past four days & average wind speed was **1.4 – 3.1 km/ hr**.

Weather forecast for next five days of Ukhrul (15th to 19th August, 2018)

Likely to have moderate to heavy rains from Saturday and mainly cloudy to overcast sky with maximum temp. **31-32°C** & minimum temp. **21-22 °C**. Relative humidity may reach upto **100 %** (max RH) & **81 %** (min RH). The average wind speed may be **2-3 km/hr**.

Field Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Rice	Tillering to Panicle Initiation		<ul style="list-style-type: none"> - Maintain water level to 5-8cm and drain out excess water if accumulated due to rain. - Weeding may be done manually or by using conoweeder followed by top dressing with Urea @33kg/ ha. - Apply 16-24 kg of Carbofuran (3G)/ ha with first top dressing of fertilizer. - After top dressing, one/ two prophylactic spray(s) in sunny days with 300-400ml Phosphamidon (40% EC), 300g Carbendazim and 20g Streptocycline diluted in 400-500 litres of water.
		Case worm, borer, leaf folder, plant hopper or thrips	Spray Coragen @3ml/15 lit of water or Lambdacythothrin @ 15ml/ 15 litre of water (at least three pumps per sangam).
		Gall midge	- For gall midge, spray Fipronil @ 2g/ 15 lit water.
		Sucking insect	Imidachloprid @ 8ml/ 15 litres of water.
		Stem borer	- For stem borer, spray Chlorantraniliprol 23.5% @ 40 ml/ha.
Soybean/ Groundnut	Flowering to pegging		<ul style="list-style-type: none"> - Hand weeding should be done after rains to avoid hairy caterpillar. Also, earthing-up and thinning may be done after rains. Avoid earthing up after 40 days of sowing in groundnut. - Maintain proper drainage system to avoid water logging due to rains.
		Hairy caterpillars	- For control of hairy caterpillars, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water).
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Blackgram/ Rice Bean	Flowering to fruiting		<ul style="list-style-type: none"> - Hand weeding should be done after rains if the weed population is high. - Spray Dichlorovos 76 EC 0.05% (0.6ml/ lit of water) against hairy caterpillars.
Seeds storage	Post-harvest management		<p>For seed purpose store the seeds in RC-Seed Bin after proper drying and cleaning of seeds along with dry charcoal at 80:20 w/w ratios. Check for moisture content or weight of charcoal and dry if required.</p> <p>For grains, store grains in well ventilated godowns after drying properly. Spray Malathion 1% on the walls of stores.</p>
Horticulture Crops			
Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
King Chilli	Fruiting	Fruit rot and aphid	- Spray Redomil @ 2g/lit water or combination of Metalyx- M and Mancozeb a.i. then Imidacloprid @ 3ml/10lit of water.
Citrus		leaf eating caterpillar, thrips & mite.	- Spray Confidor @ 0.5 ml/ lit of water.
		Powdery mildew	Fungicide like Carbendazim and sixer must be applied as prophylactic measures. If powdery mildew is seen in the orchard, then Bayleton @7 g / 15 lit of water should be sprayed in the grown up trees.
Ginger/ Turmeric	Rhizome formation	Soft rot in ginger and Rhizome rot in turmeric	- Spray Redomil MZ 72 WP @ 2g/lit water alternately with Carbendazim @ 2g/lit water at 14 days interval.



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“Gramin Krishi Mausam Seva”



Animal Sciences			
* Provide clean drinking water for birds and animals. Drainage may be constructed well around the birds or animals sheds to avoid water logging.			
Name of bird/ animal	Stage	Disease and Management	Agro-meteorological advisories
Poultry (Chicken/ Duck)	All age groups	• Vaccination	• Vaccinate birds against Fowl Pox.
		• Deworming	• Deworming against Helminth parasites using Piperazine liquid @ 30-40ml for 100 birds in drinking water. Again give half of the dose on second day.
		• Management	• Do not allow to <i>consume muddy water to protect from E.coli infection. Use water sanitizer.</i>
Sheep/ Goat	All age groups	• Vaccination	• If the animals are not vaccinated against F.M.D., B.Q., H.S., Enterotoxaemia, etc. do it in this month.
		• Fascioliosis	• Give Tolzan-F @ 15ml orally/ kg b. wt. It must be associated with vitamins like Livozyme @ 50ml twice daily.
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		• Endoparasite/ Ectoparasite	• Inject Ivomec @ 1 ml/ 50 kg body weight.
		• Care & Management	• Give mineral mixture @ 30-50g daily.
		• Milk fever	• Give 100-150ml of mixture calcium and phosphorous daily.
Fishery			
* <i>Encircle pond with happa net or raise the pond dyke height to avoid escape of fishes.</i>			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Breeding	Pond and water	- Clean and clear water having 7.0-7.8 pH free from unwanted vegetation and insects. Water depth should be maintained at 1.0-1.5m.
		Fish	- Select good quality of carp brooders (2-4 years old) having more than 1kg b. wt. for Rohu, Mrigal, Catla, Kuri for seed production. For Pengba & Khabak b. wt. May be less than 300g.
		Hormone dose	- Ovotide/ Wova-FH/ Ovaprim@ 0.5ml/kg body weight can be injected to induce for spawning.
	nurseries		- Ponds should be free from unwanted vegetation and insects and water depth should be maintained at 1.0-1.5m. p ^H of pond water should be maintained at 7.0-7.5. 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.
	Grow -out	Pond and water	- Regular manuring at interval of 30 days with a slurry of RCD @ 1500kg/ha. Maintained p ^H of pond water at 7.0-7.5. Greenish colouration of water is desirable. If any change in colour, odour of water half of the water should be drain out and replace with fresh water.
		Fish	- 8000-10,000 fingerlings/ha can be stocked. Sampling of fish should be done by regular netting.
		Feed	- Well balanced feed fortified with vitamins and minerals should be provided @ 3-5% body weight per day. Feed can be fed at 2-3 times a day.

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