

# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा



**GRAMIN KRISHI MAUSAM SEWA**  
(Integrated Agro-Meteorological Advisory Services)

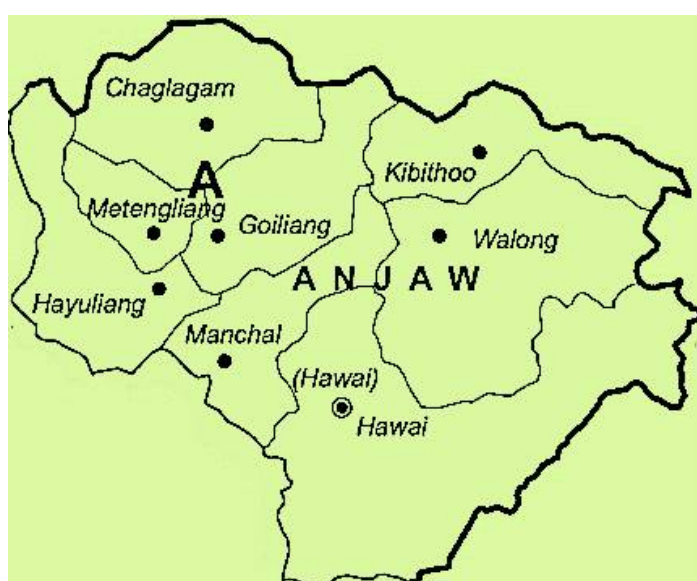


AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: Anjaw**

**No: 78/2017/Fri**

**Dated: 29<sup>th</sup> September, 2017**



Hawai: Latitude: 28.2179994/ Longitude: 94.7277528/Altitude: 1296 m amsl

Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
No weather summary available	<b>Mostly cloudy with possibility of light/moderate rainfall.</b> Daily maximum and minimum temperature for the following period is predicted to be 21-22°C and 13-15°C respectively. Expected morning and evening relative humidity will be 79-85% and 58-65% respectively. Wind direction is mainly E & ESE at a speed range of 4-5 kmph.
<b>Warning:</b>	•

### Weather Based Agro-meteorological Advisories Bulletin

#### General Recommendations

- **Spraying operation should be done only on dry/clear weather**
- **Obtain seeds from reputed/certified/reliable source**
- **Use fertilizers/pesticides as per recommended doses for the location**
- **Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides**
- **Warning: Spraying of DDT in crops is lethal**

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
FIELD CROPS			
Rice	Panicle initiation/ Dough Grain filling stage	Gundhi bug/ leaf folder/ rice skipper	<ul style="list-style-type: none"><li>• Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li><li>• Maintain periphery of nursery field weed free and clean to prevent disease and pest harboring in weeds.</li><li>• <b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li></ul>
Groundnut	Pegging	Leaf Spot/tikka disease	<ul style="list-style-type: none"><li>• On sunny day, spray carbendazim/Mancozeb @ 1-2 ml/lit of water</li><li>• Do not disturb the soil structure by spading/hoeing in the field.</li></ul>
VEGETABLES			
Rabi vegetables	Nursery		<ul style="list-style-type: none"><li>• <b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li><li>• <b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with Trichoderma @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li><li>• <b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li><li>• Weeding of the standing crop may be done,</li><li>• Monitoring of standing crops against attack of insect pests and diseases.</li></ul>
Okra	Maturing	Pod borer	<ul style="list-style-type: none"><li>• Harvesting and marketing of tender okra fruits,</li><li>• Collection and destruction of borer damaged pod,</li></ul>
Ginger/turmeric	Vegetative stage	Rhizome rot	<ul style="list-style-type: none"><li>• <b><u>Under excessive moisture, there is every possibility of rhizome rot in ginger and turmeric. To manage the disease, provide adequate drainage and apply Trichoderma harzianum @ 50 g/bed along with FYM/ neem cake.</u></b></li><li>• Provide adequate drainage to prevent water stagnation and apply Trichoderma harzianum @50 g/bed along with FYM/neem cake.</li><li>• Mulching should be done with locally available mulch,</li><li>• Earthing up of exposed rhizome,</li></ul>
HORTICULTURAL CROPS			
Kiwi	Fruiting		<ul style="list-style-type: none"><li>• Manuring with well decomposed FYM@15kg/plant followed by mulching with paddy straw.</li></ul>
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"><li>• Undertake necessary tillage operation if there is no rain.</li><li>• Remove weeds from the tree basin and prepare ring around the tree.</li><li>• Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with streptocycline 6 gms in 60 liters of water to control canker</li><li>• Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li><li>• <b><u>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</u></b></li></ul>
Pineapple	Fruiting		<ul style="list-style-type: none"><li>• Mulching with locally available materials like dry grass/paddy straw recommended</li></ul>
Banana	Bunching & planting		<ul style="list-style-type: none"><li>• Desuckering of banana to be done leaving one suckers per plant to maintain the health of mother plant.</li><li>• Remove the male flower in banana bunches to attain better finger/fruit size.</li><li>• Remove excess sucker from Banana in mother plant and give support in banana bunches to protect falling due to heavy weight or storm.</li></ul>
Large Cardamom	Flowering stage	Chirkey Disease (fungal inection) & Chirke and Foorkey (virus	<ul style="list-style-type: none"><li>• Mulching with locally available materials like dry grass/paddy straw recommended</li><li>• Remove diseased part &amp; keep inflorescence clean.</li><li>• Need based spray of broad spectrum fungicide like carbendazim @2g/lit of water.</li></ul>

		infection)	<ul style="list-style-type: none"> <li>Uproot &amp; burn virus infected plants / Spray Imidacloprid 17.8% SL @ 2ml/10 lit at 10-15 days interval.</li> </ul>
<b>LIVESTOCKS</b>			
<b>Livestock</b>	<b>Stage</b>	<b>Disease</b>	<b>Precautionary Practices to be followed</b>
<b>General</b> <ul style="list-style-type: none"> <li>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</li> <li>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</li> </ul>			
Fishery			<ul style="list-style-type: none"> <li>Application of quick lime is highly recommended in order to rectify water pH.</li> <li>Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>Reduce concentrate diet up to 5%</li> <li>Provide adequate potable water</li> <li><b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li><b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>Proper ventilation of shed</li> <li>Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>Avoid overcrowding.</li> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>Vaccination as per the schedule with proper consultation with vet. <ul style="list-style-type: none"> <li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days: F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul> </li> <li>Remove wet litter</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li><b><u>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</u></b></li> <li>Provide UMB/Molases if possible in the feed</li> <li>Provide 10-30 ml of vitamin B-Complex in feed</li> <li><b>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</b></li> <li><b>Separate sick animals</b></li> <li>The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>
Mithun		FMD	<ul style="list-style-type: none"> <li>Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route. Pregnant animals above 7 months of pregnancy should be avoided from vaccination.</li> </ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

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(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

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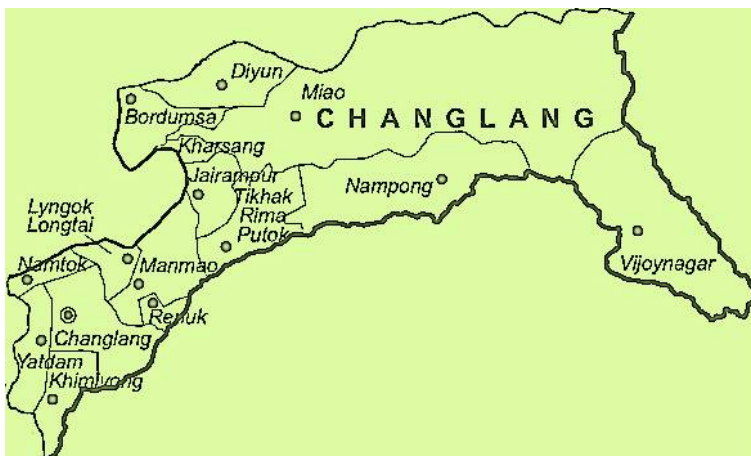


AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: Changlang**

**No: 78/2017/Fri**

**Dated: 29<sup>th</sup> September, 2017**



Changlang (HQ): Latitude: 27.1305856/Longitude: 95.7342373/Altitude: 580 masl

Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Rainfall = Changlang: 0.0 mm Miao: 26.6 mm (up to 26 <sup>th</sup> Sept)	Mostly cloudy with possibility of moderate rainfall. Daily maximum and minimum temperature for the following period is predicted to be 30-31°C and 23-24°C respectively. Expected morning and evening relative humidity will be 86-88% and 73-76% respectively. Wind direction is variable with speed range of 2-3 kmph.
<b>Warning</b>	•

### Weather Based Agro-meteorological Advisories Bulletin

#### General Recommendations

- Spraying operation should be done only on dry/clear weather
- Go for low cost polyhouses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing

It is advised that farmers may use zero tillage technology in harvested paddy fields in upland/Jhum for sowing of Pea/maize. In this method without ploughing, sowing of pea may be done to use moisture of rice field and straw of rice as organic manure. Taking into account the rainfall recorded during last week, this technology is very suitable for harvested *Jhum* rice field.

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
FIELD CROPS			
Rice	Dough Grain filling stage	Gundhi bug	<ul style="list-style-type: none"> <li>Monitor crop against attack of gundhi bug,</li> <li>Weeding is advised to ward off the alternate host of gundhi bug</li> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li> <li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li> </ul>
Groundnut	Pegging	Leaf Spot/tikka disease	<ul style="list-style-type: none"> <li>On sunny day, spray carbendazim/Mancozeb @ 1-2 ml/lit of water</li> <li>Do not disturb the soil structure by spading/hoeing in the field.</li> <li>Hand weeding with care is recommended.</li> </ul>
Pulses	Flowering	Blister beetle	<ul style="list-style-type: none"> <li>Go for manual picking of Blister beetle without delay because the incidence of the pest during flowering stage cause huge lose in harvest</li> </ul>
VEGETABLES			
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li> <li><b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with <i>Trichoderma</i> @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li> <li><b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li> <li><b>Weeding of the standing crop may be done,</b></li> <li><b>Monitoring of standing crops against attack of insect pests and diseases.</b></li> </ul>
Tomato	Fruiting		<ul style="list-style-type: none"> <li>Removing sideshoots is an important job which prevents the fruits being shaded by leaves.</li> <li>Provide shed to protect from excessive rainfall</li> </ul>
Cucurbits (Bottle gourd,Ridge gourd, Pumpkin, Bitter gourd, Cucumber, etc.)	Harvesting	Aphid/ Red pumpkin beetle/ Cutworm	<ul style="list-style-type: none"> <li>On clear/dry weather, Spraying of Dimethoate 30 EC @ 3ml/litre of water is advised against aphids,</li> <li>On clear/dry weather, Spraying of Deltamethrin 4ml/10 litre of water is advised for management of Red pumpkin beetle grass,</li> <li>Drench the base with chlorpyrifos 20EC @ 2ml/litre; 1litre per plant.</li> </ul>
HORTICULTURAL CROPS			
Citrus	Fruit development stage	Citrus Canker	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker</li> <li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li> </ul>
Guava	Fruit Development	Fruit fly	<ul style="list-style-type: none"> <li>Basin cleaning and manuring</li> <li>Install fruit fly pheromone traps for collection and destruction of the adult insects</li> </ul>
Pineapple	Harvesting		<ul style="list-style-type: none"> <li>The fruit must be harvested with crown (whorl of leaves attached to the apical end of the fruit) to prolong the freshness of fruit and avoid microbial attack.</li> </ul>



Banana	Fruiting/ Ripening	Scary beetle	<ul style="list-style-type: none"> <li>To control scary beetle – application of Malathion dust @ 0.5% is advised,</li> <li>Cover bunches with banana bunch covers or sacks or locally available materials to protect against sunscald, birds and insects.</li> </ul>
Large Cardamom	Flowering stage	Chirkey Disease (fungal inection) & Chirke and Foorkey (virus infection)	<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Remove diseased part &amp; keep inflorescence clean.</li> <li>Uproot &amp; burn virus infected plants</li> </ul>
Ginger/Turmeric	Seedling		<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> </ul>
Honey Bees			
Honey bees			<ul style="list-style-type: none"> <li>Box must be covered with straw/dry leaves to provide warmth</li> <li>Provide sugar syrup</li> </ul>
LIVESTOCKS			
Livestock	Stage	Disease	Precautionary Practices to be followed
<b>General</b> <ul style="list-style-type: none"> <li>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</li> <li>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</li> </ul>			
Goat	All stages		<ul style="list-style-type: none"> <li>Deworming for gastrointestinal parasite</li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li><b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>Proper ventilation of shed</li> <li>Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>Avoid overcrowding.</li> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>Vaccination as per the schedule with proper consultation with vet. <ul style="list-style-type: none"> <li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days: F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul> </li> <li>Remove wet litter</li> </ul>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>Reduce concentrate diet up to 5%</li> <li>Provide adequate potable water</li> <li><b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Fishery			<ul style="list-style-type: none"> <li>Application of quick lime is highly recommended in order to rectify water pH.</li> <li>Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li><b><u>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</u></b></li> <li>Provide UMB/Molases if possible in the feed</li> <li>Provide 10-30 ml of vitamin B-Complex in feed</li> <li>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</li> <li>Separate sick animals</li> <li>The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>

**Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247**

Issued jointly by ICAR-RC for NEH Region, Arunachal Pradesh Centre, Basar and India Meteorological Department  
Contact: - [IAAS.BASAR@gmail.com](mailto:IAAS.BASAR@gmail.com), Phone Number: - 03795-226247/37, -96 (Fax)

**Agrometeorological Field Unit  
ICAR, BASAR**

# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

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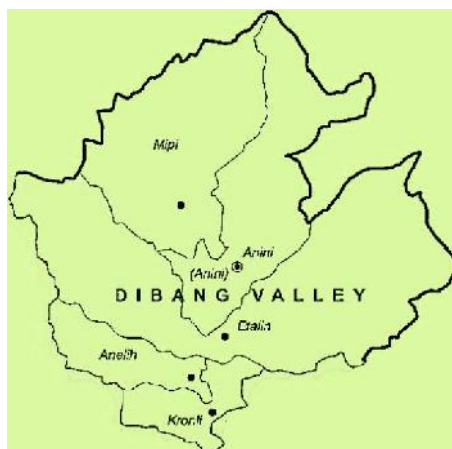


AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: Dibang Valley**

**No: 78/2017/Fri**

**Dated: 29<sup>th</sup> September, 2017**



Anini: Latitude: 28.2179994/Longitude: 94.7277528/Altitude: 1968 masl

Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Rainfall = 21.0 mm (Anini) (up to 26 <sup>th</sup> Sept)	Mostly cloudy with possibility of light/moderate rainfall. Daily maximum and minimum temperature for the following period is predicted to be 20-22°C and 09-14°C respectively. Expected morning and evening relative humidity will be 84-90% and 57-78% respectively. Wind direction is mainly E with speed range of 5-6 kmph.
<b>Warning:</b>	•

### Weather Based Agro-meteorological Advisories Bulletin

#### General recommendations

- Disinfecting the animal/bird sheds with lime powder/ bleaching powder/ 4%NaOH at regular interval is advocated
- Go for spray operation only on dry/clear weather.
- Go for low cost polyhouses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing



Crop	Stage	Pest/Disease	Precautionary Practices to be followed
<b>FIELD CROPS</b>			
Rice	Panicle initiation/ Dough Grain filling stage	Gundhi bug/ leaf folder/ rice skipper	<ul style="list-style-type: none"> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li> <li>Maintain periphery of nursery field weed free and clean to prevent disease and pest harboring in weeds.</li> <li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li> </ul>
Pulses	Flowering	Blister beetle	<ul style="list-style-type: none"> <li>Go for manual picking of Blister beetle without delay because the incidence of the pest during flowering stage cause huge lose in harvest</li> </ul>
<b>VEGETABLES</b>			
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li> <li><b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with <i>Trichoderma</i> @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li> <li><b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li> <li><b>Weeding of the standing crop may be done,</b></li> <li><b>Monitoring of standing crops against attack of insect pests and diseases.</b></li> </ul>
Okra	Maturing	Pod borer	<ul style="list-style-type: none"> <li>Harvesting and marketing of tender okra fruits,</li> <li>Collection and destruction of borer damaged pod,</li> </ul>
Ginger/turmeric	Vegetative stage	Rhizome rot	<ul style="list-style-type: none"> <li><b><u>Under excessive moisture, there is every possibility of rhizome rot in ginger and turmeric. To manage the disease, provide adequate drainage and apply <i>Trichoderma harzianum</i> @ 50 g/bed along with FYM/ neem cake.</u></b></li> <li>Provide adequate drainage to prevent water stagnation and apply <i>Trichoderma harzianum</i> @50 g/bed along with FYM/neem cake.</li> <li>Mulching should be done with locally available mulch,</li> <li>Earthing up of exposed rhizome,</li> </ul>
<b>HORTICULTURAL CROPS</b>			
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker</li> <li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li> <li><b><u>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</u></b></li> </ul>
Ginger/Turmeric	Seedling		<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Proper drainage to be done and avoid water stagnation</li> <li>Earthing up of ginger/turmeric along with basal application of required fertilizer should be done</li> </ul>
Banana	Bunching & planting		<ul style="list-style-type: none"> <li>Desuckering of banana to be done leaving one suckers per plant to maintain the health of mother plant.</li> <li>Remove the male flower in banana bunches to attain better finger/fruit size.</li> <li>Remove excess sucker from Banana in mother plant and give support in banana bunches to protect falling due to heavy weight or storm.</li> </ul>
Apple	Vegetative	Wooly aphids	<ul style="list-style-type: none"> <li>Swab the stem with mineral oil against wooly aphid.</li> </ul>
<b>Honey Bees</b>			
Honey bees			<ul style="list-style-type: none"> <li>In case of rain provide sugar syrup</li> </ul>
<b>LIVESTOCKS</b>			

Livestock	Stage	Disease	Precautionary Practices to be followed
<b>General</b> <ul style="list-style-type: none"> <li>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</li> <li>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</li> </ul>			
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul style="list-style-type: none"> <li>Keep the houses dry and clean.</li> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>Reduce concentrate diet up to 5%</li> <li>Provide adequate potable water</li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li><b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>Proper ventilation of shed</li> <li>Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>Avoid overcrowding.</li> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>Vaccination as per the schedule with proper consultation with vet. <ul style="list-style-type: none"> <li>Day old chick: HVT Marek disease vaccine, 4-7 days: F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul> </li> <li>Remove wet litter</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li><u>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</u></li> <li>Provide UMB/Molases if possible in the feed</li> <li>Provide 10-30 ml of vitamin B-Complex in feed</li> <li><b>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</b></li> <li><b>Separate sick animals</b></li> <li>The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>Reduce concentrate diet up to 5%</li> <li>Provide adequate potable water</li> <li><b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Fishery			<ul style="list-style-type: none"> <li>Application of quick lime is highly recommended in order to rectify water pH.</li> <li>Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Mithun		FMD	<ul style="list-style-type: none"> <li>Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route.</li> <li>Pregnant animals above 7 months of pregnancy should be avoided.</li> </ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

Issued jointly by ICAR-RC for NEH Region, Arunachal Pradesh Centre, Basar and India Meteorological Department  
Contact: - [IAAS.BASAR@gmail.com](mailto:IAAS.BASAR@gmail.com), Phone Number: - 03795-226247/37, -96 (Fax)

Agrometeorological Field Unit

ICAR. BASAR

# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा



**GRAMIN KRISHI MAUSAM SEWA**  
(Integrated Agro-Meteorological Advisory Services)

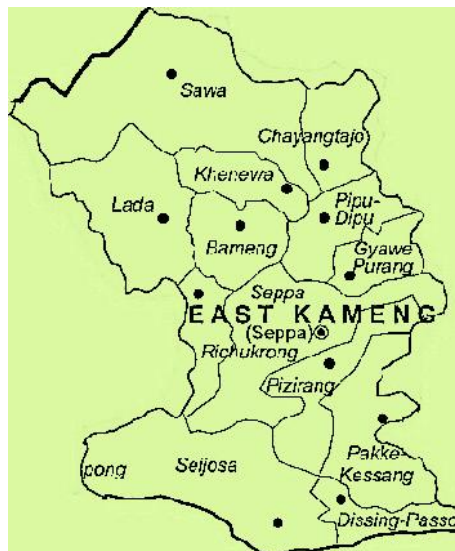


AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

### District: East Kameng

No: 78/2017/Fri

Dated: 29<sup>th</sup> September, 2017



Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Rainfall = 18.6 mm (up to 26 <sup>th</sup> Sept)	Mostly cloudy with possibility of light/moderate rainfall. Daily maximum and minimum temperature for the following period is predicted to be 25-26°C and 22°C respectively. Expected morning and evening relative humidity will be 92-96% and 64-80% respectively. Expected wind direction is mainly SE & SSE with speed range of 3-4 kmph.
<b>Warning:</b>	•

### Weather Based Agro-meteorological Advisories Bulletin

#### General Recommendations

- Go for low cost polyhouses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing
- Disinfecting the animal/bird sheds with lime powder/ bleaching powder/ 4%NaOH at regular interval is advocated

It is advised that farmers may use zero tillage technology in harvested paddy fields in upland/*Jhum* for sowing of Pea/maize. In this method without ploughing, sowing of pea may be done to use moisture of rice field and straw of rice as organic manure. Taking into account the rainfall recorded during last week, this technology is very suitable for harvested *Jhum* rice field.

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
<b>FIELD CROPS</b>			
Rice	Panicle initiation/ Dough Grain filling stage	Gundhi bug/ leaf folder/ rice skipper	<ul style="list-style-type: none"> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li> <li>Maintain periphery of nursery field weed free and clean to prevent disease and pest harboring in weeds.</li> <li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li> </ul>
Groundnut	Pegging	Leaf Spot/tikka disease	<ul style="list-style-type: none"> <li>On sunny day, spray carbendazim/Mancozeb @ 1-2 ml/lit of water</li> <li>Do not disturb the soil structure by spading/hoeing in the field.</li> <li>Hand weeding with care is recommended.</li> </ul>
Pulses	Flowering	Blister beetle	<ul style="list-style-type: none"> <li>Go for manual picking of Blister beetle without delay because the incidence of the pest during flowering stage cause huge lose in harvest</li> </ul>
<b>VEGETABLES</b>			
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li> <li><b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with <i>Trichoderma</i> @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li> <li><b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li> <li><b>Weeding of the standing crop may be done,</b></li> <li><b>Monitoring of standing crops against attack of insect pests and diseases.</b></li> </ul>
<b>HORTICULTURAL CROPS</b>			
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker</li> <li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li> <li><b>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</b></li> </ul>
Large Cardamom	Flowering stage	Chirkey Disease (fungal inection) & Chirke and Foorkey (virus infection)	<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Remove diseased part &amp; keep inflorescence clean.</li> <li>Uproot &amp; burn virus infected plants</li> </ul>
Pineapple	Active vegetative		<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Remove excess suckers to increase fruit size and improve quality.</li> </ul>
Banana	Bunching & planting		<ul style="list-style-type: none"> <li>Desuckering of banana to be done leaving one suckers per plant to maintain the health of mother plant.</li> <li>Remove the male flower in banana bunches to attain better finger/fruit size.</li> <li>Remove excess sucker from Banana in mother plant and give support in banana bunches to protect falling due to heavy</li> </ul>

			weight or storm.
Ginger/Turmeric	Seedling		<ul style="list-style-type: none"><li>• Mulching with locally available materials like dry grass/paddy straw recommended</li><li>• Proper drainage to be done and avoid water stagnation</li><li>• Earthing up of ginger/turmeric along with basal application of required fertilizer should be done</li></ul>
Orchards			<ul style="list-style-type: none"><li>• Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li><li>• Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li></ul>
Agroforestry			
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings
LIVESTOCKS			
Livestock	Stage	Disease	Precautionary Practices to be followed
General			
<ul style="list-style-type: none"><li>• Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</li><li>• Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</li></ul>			
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"><li>• Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li><li>• 1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li><li>• Reduce concentrate diet up to 5%</li><li>• Provide adequate potable water</li><li>• <b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li></ul>
Fishery			<ul style="list-style-type: none"><li>• Application of quick lime is highly recommended in order to rectify water pH.</li><li>• Application of fish feed (mustard oil cake) is essential for achieving higher yield</li></ul>
Poultry	All stages		<ul style="list-style-type: none"><li>• <b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li><li>• Proper ventilation of shed</li><li>• Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li><li>• Avoid overcrowding.</li><li>• Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li><li>• Vaccination as per the schedule with proper consultation with vet.<ul style="list-style-type: none"><li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days: F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li></ul></li><li>• Remove wet litter</li></ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"><li>• <u>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</u></li><li>• Provide UMB/Molases if possible in the feed</li><li>• Provide 10-30 ml of vitamin B-Complex in feed</li><li>• <b>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</b></li><li>• <b>Separate sick animals</b></li><li>• The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li><li>• Long hair near the udder/stomach/back legs should be teamed short.</li></ul>
Mithun		FMD	<ul style="list-style-type: none"><li>• Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route.</li></ul>

			<ul style="list-style-type: none"><li>• Pregnant animals above 7 months of pregnancy should be avoided.</li></ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

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Agrometeorological Field Unit  
ICAR. BASAR



# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा



**GRAMIN KRISHI MAUSAM SEWA**  
(Integrated Agro-Meteorological Advisory Services)



AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: East Siang**

**No: 78/2017/Fri**

**Dated: 29<sup>th</sup> September, 2017**



Pasighat: Latitude: 28.0700/Longitude: 95.3300/Altitude: 153 masl

Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Rainfall: 85.6 mm; T. Max: 34.0°C; T. Min: 23.0°C ; RH: 76-100% (up to 26 <sup>th</sup> Sept)	Mostly cloudy with possibility of very light/moderate rainfall. Daily maximum and minimum temperature for the following period is predicted to be 29-32°C and 22-24°C respectively. Expected morning and evening relative humidity will be 85-93% and 59-82% respectively. Expected wind direction is mainly W with speed range of 3-4 kmph.
Warning:	•

### Weather Based Agro-meteorological Advisories Bulletin

#### General Recommendations

- Go for low cost polyhouses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing

It is advised that farmers may use zero tillage technology in harvested paddy fields in upland/Jhum for sowing of Pea/maize. In this method without ploughing, sowing of pea may be done to use moisture of rice field and straw of rice as organic manure. Taking into account the rainfall recorded during last week, this technology is very suitable for harvested *Jhum* rice field.

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
<b>FIELD CROPS</b>			
Rice	Dough Grain filling stage	Gundhi bug	<ul style="list-style-type: none"> <li>Monitor crop against attack of gundhi bug,</li> <li>Weeding is advised to ward off the alternate host of gundhi bug</li> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li> <li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li> </ul>
Pulses	Flowering	Blister beetle	<ul style="list-style-type: none"> <li>Go for manual picking of Blister beetle without delay because the incidence of the pest during flowering stage cause huge lose in harvest</li> </ul>
Groundnut	Pegging	Leaf Spot/tikka disease	<ul style="list-style-type: none"> <li>On sunny day, spray carbendazim/Mancozeb @ 1-2 ml/lit of water</li> <li>Do not disturb the soil structure by spading/hoeing in the field.</li> <li>Hand weeding with care is recommended.</li> </ul>
<b>VEGETABLES</b>			
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li> <li><b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with <i>Trichoderma</i> @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li> <li><b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li> <li><b>Weeding of the standing crop may be done,</b></li> <li><b>Monitoring of standing crops against attack of insect pests and diseases.</b></li> </ul>
Cucurbits (Bottle gourd,Ridge gourd, Pumpkin, Bitter gourd, Cucumber, etc.)	Harvesting	Aphid/ Red pumpkin beetle/ Cutworm	<ul style="list-style-type: none"> <li>On clear/dry weather, Spraying of Dimethoate 30 EC @ 3ml/litre of water is advised against aphids,</li> <li>On clear/dry weather, Spraying of Deltamethrin 4ml/10 litre of water is advised for management of Red pumpkin beetle grass,</li> <li>Drench the base with chlorpyrifos 20EC @ 2ml/litre; 1litre per plant.</li> </ul>
Tomato	Fruiting		<ul style="list-style-type: none"> <li>Removing sideshoots is an important job which prevents the fruits being shaded by leaves.</li> <li>As temperatures rise, keep watering your plants, but avoid watering the leaves excessively that may lead to disease infestation.</li> </ul>
Ginger/turmeric	Vegetative stage	Soft Rot	<ul style="list-style-type: none"> <li>Cultural practice like weeding/earthing up is recommended followed by basal dose of fertilizers</li> <li>For management of soft rot in ginger: Need based drenching of Metalaxyl-8% + Mancozeb 64% WP @ 2.5 g per lit of water.</li> </ul>
<b>HORTICULTURAL CROPS</b>			
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker</li> </ul>

			<ul style="list-style-type: none"><li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li><li><b>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</b></li></ul>
Guava	Fruit Development	Fruit fly	<ul style="list-style-type: none"><li>Basin cleaning and manuring</li><li>Install fruit fly pheromone traps for collection and destruction of the adult insects</li></ul>
Banana	Fruiting/Ripening		<ul style="list-style-type: none"><li>Cover bunches with banana bunch covers or sacks or locally available materials to protect against sunscald, birds and insects.</li></ul>
Pineapple	Harvesting		<ul style="list-style-type: none"><li>The fruit must be harvested with crown (whorl of leaves attached to the apical end of the fruit) to prolong the freshness of fruit and avoid microbial attack.</li></ul>
Large Cardamom	Flowering stage	Chirkey Disease (fungal inection) & Chirke and Foorkey (virus infection)	<ul style="list-style-type: none"><li>Mulching with locally available materials like dry grass/paddy straw recommended</li><li>Remove diseased part &amp; keep inflorescence clean.</li><li>Uproot &amp; burn virus infected plants.</li></ul>
Ginger/Turmeric	Seedling		<ul style="list-style-type: none"><li>Proper drainage to be done and avoid water stagnation</li><li>Earthing up of ginger/turmeric along with basal application of required fertilizer should be done</li></ul>
Honey Bees			
Honey bees			<ul style="list-style-type: none"><li>On prolong rain, provide sugar syrup</li></ul>
LIVESTOCKS			
Livestock	Stage	Disease	Precautionary Practices to be followed
General			
<ul style="list-style-type: none"><li><b>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</b></li><li><b>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</b></li></ul>			
Goat	All stages		<ul style="list-style-type: none"><li>Deworming for gastrointestinal parasite</li></ul>
Fishery			<ul style="list-style-type: none"><li>Application of quick lime is highly recommended in order to rectify water pH.</li><li>Application of fish feed (mustard oil cake) is essential for achieving higher yield</li></ul>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"><li>Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li><li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li><li>Reduce concentrate diet up to 5%</li><li>Provide adequate potable water</li><li><b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li></ul>
Poultry	All stages		<ul style="list-style-type: none"><li><b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li><li>Proper ventilation of shed</li><li>Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li><li>Avoid overcrowding.</li><li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li><li>Vaccination as per the schedule with proper consultation with vet.<ul style="list-style-type: none"><li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days: F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li></ul></li><li>Remove wet litter</li></ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"><li><u><b>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</b></u></li><li>Provide UMB/Molases if possible in the feed</li><li>Provide 10-30 ml of vitamin B-Complex in feed</li><li><b>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6</b></li></ul>

			<b>months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</b> <ul style="list-style-type: none"><li>• <b>Separate sick animals</b></li><li>• The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li><li>• Long hair near the udder/stomach/back legs should be teamed short.</li></ul>
Mithun		FMD	<ul style="list-style-type: none"><li>• Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route.</li><li>• Pregnant animals above 7 months of pregnancy should be avoided.</li></ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

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Agrometeorological Field Unit  
ICAR, BASAR

# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा

GRAMIN KRISHI MAUSAM SEWA

(Integrated Agro-Meteorological Advisory Services)



AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: Kurung Kumey**

**No: 78/2017/Fri**

**Dated: 29<sup>th</sup> September, 2017**



Koloriang: Latitude: 27.9167°/Longitude: 93.3500°/Altitude: 1040 masl

Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Past weather summary not available	<b>Mostly cloudy with possibility of very light/moderate rainfall.</b> Daily maximum and minimum temperature for the following period is predicted to be 20-22°C and 13-14°C respectively. Expected morning and evening relative humidity will be 95-96% and 71-83% respectively. Wind direction is mainly WSW & W with wind speed range of 2-3 kmph.
<b>Warning</b>	•

### Weather Based Agro-meteorological Advisories Bulletin

#### General Recommendations

- **Spray operations should be done only on dry/clear weather or in extreme case use stickers**
- **Go for low cost polyhouses for year round cultivation of vegetables**
- **Obtain seeds from reputed/certified/reliable source**
- **Use fertilizers/pesticides as per recommended doses for the location**
- **Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides**
- **ICAR Basar recommend poultry variety VANARAJA for backyard rearing**
- **Disinfecting the animal/bird sheds with lime powder/ bleaching powder/ 4%NaOH at regular interval is advocated**

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
<b>FIELD CROPS</b>			
Rice	Panicle initiation/ Dough Grain filling stage	Gundhi bug/ leaf folder/ rice skipper	<ul style="list-style-type: none"> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li> <li>Maintain periphery of nursery field weed free and clean to prevent disease and pest harboring in weeds.</li> <li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li> </ul>
<b>VEGETABLES</b>			
Cauliflower /Cabbage	Nursery Preparation	Cut worm	<ul style="list-style-type: none"> <li>Maintain proper moisture level in the nursery.</li> <li>Nursery preparation for early cruciferous crops may be done in raised bed (Preferable in shaded area),</li> <li>Due to wet environment there is possibility of attack of Cut worm. If infestation is very high, to protect the seedlings apply Carbaryl (Sevin) 5% as bait @ 10 kg per acre</li> </ul>
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><u>In present weather conditions, raising nursery of hybrid tomato, cauliflower and cabbage may be done. The seeds should be sown on raised bed (15-20 cm) after treating with <i>Trichoderma</i> @ 10 g/kg are with Captan/Thiram @ 3 g/kg seeds. After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></li> </ul>
Okra	Maturing	Pod borer	<ul style="list-style-type: none"> <li>Harvesting and marketing of tender okra fruits,</li> <li>Collection and destruction of borer damaged pod,</li> </ul>
Ginger/turmeric	Vegetative stage	Rhizome rot	<ul style="list-style-type: none"> <li><b><u>Under excessive moisture, there is every possibility of rhizome rot in ginger and turmeric. To manage the disease, provide adequate drainage and apply <i>Trichoderma harzianum</i> @ 50 g/bed along with FYM/ neem cake.</u></b></li> <li>Provide adequate drainage to prevent water stagnation and apply <i>Trichoderma harzianum</i> @50 g/bed along with FYM/neem cake.</li> <li>Mulching should be done with locally available mulch,</li> <li>Earthing up of exposed rhizome,</li> </ul>
<b>HORTICULTURAL CROPS</b>			
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker</li> <li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li> <li><b>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</b></li> </ul>
Kiwi	Vegetative		<ul style="list-style-type: none"> <li>Manuring with well decomposed FYM@15kg/plant followed by mulching with paddy straw to protect from heavy rainfall</li> </ul>
Large Cardamom	Flowering stage	Chirkey Disease (fungal inection) & Chirke and Foorkey (virus infection)	<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Remove diseased part &amp; keep inflorescence clean.</li> <li>Uproot &amp; burn virus infected plants</li> </ul>
Pineapple	Active vegetative		<ul style="list-style-type: none"> <li>Remove excess suckers to increase fruit size and improve quality.</li> </ul>
Banana	Bunching & planting		<ul style="list-style-type: none"> <li>Desuckering of banana to be done leaving one suckers per plant to maintain the health of mother plant.</li> <li>Remove the male flower in banana bunches to attain better finger/fruit size.</li> <li>Remove excess sucker from Banana in mother plant and give support in banana bunches to protect falling due to heavy weight or storm.</li> </ul>



			<ul style="list-style-type: none"> <li>Sword suckers with stout base, tapering towards the top with narrow leaves should be selected for planting at 3m x 3m spacing.</li> </ul>
Ginger/Turmeric	Vegetative		<ul style="list-style-type: none"> <li>Proper drainage to be done and avoid water stagnation</li> <li>Earthing up of ginger/turmeric along with basal application of required fertilizer should be done</li> </ul>
<b>Honey Bees</b>			
			<ul style="list-style-type: none"> <li>Box must be covered with straw/dry leaves to provide warmth</li> </ul>
<b>LIVESTOCKS</b>			
<b>General</b> <ul style="list-style-type: none"> <li>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</li> <li>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</li> </ul>			
<b>Livestock</b>	<b>Stage</b>	<b>Disease</b>	<b>Precautionary Practices to be followed</b>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>Reduce concentrate diet up to 5%</li> <li>Provide adequate potable water</li> <li><b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Fishery			<ul style="list-style-type: none"> <li>Application of quick lime is highly recommended in order to rectify water pH.</li> <li>Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li>Proper ventilation of shed</li> <li>Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>Follow ‘All in All out’ system of rearing and do not rear birds of different age groups together.</li> <li>Avoid overcrowding.</li> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>Provide adequate clean drinking water+electrolyte and multi-vitamins</li> <li>Vaccination as per the schedule with proper consultation with vet. <ul style="list-style-type: none"> <li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days: F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul> </li> <li>Remove wet litter</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li><b><u>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</u></b></li> <li>Provide UMB/Molases if possible in the feed</li> <li>Provide 10-30 ml of vitamin B-Complex in feed</li> <li><b>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</b></li> <li><b>Separate sick animals</b></li> <li>The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>
Mithun		FMD	<ul style="list-style-type: none"> <li>Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route.</li> <li>Pregnant animals above 7 months of pregnancy should be avoided.</li> </ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

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Contact: - [IAAS.BASAR@gmail.com](mailto:IAAS.BASAR@gmail.com), Phone Number: - 03795-226247/37, -96 (Fax)

**Agrometeorological Field Unit**  
**ICAR. BASAR**

# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा

GRAMIN KRISHI MAUSAM SEWA

(Integrated Agro-Meteorological Advisory Services)



AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: Lohit**

No: 78/2017/Fri

Dated: 29<sup>th</sup> September, 2017



Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Rainfall = 23.0 mm (up to 26 <sup>th</sup> Sept)	Mostly cloudy with possibility of moderate rainfall. Daily maximum and minimum temperature for the following period is predicted to be 30-31°C and 23-24°C respectively. Expected morning and evening relative humidity will be 82-86% and 64-69% respectively. Wind direction is mainly E with speed range of 3-4 kmph.
Warning:	•

### Weather Based Agro-meteorological Advisories Bulletin

#### General Recommendations

- Spraying operation should be done only on dry/clear weather
- Go for low cost poly-houses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing.

It is advised that farmers may use zero tillage technology in harvested paddy fields in upland/Jhum for sowing of Pea/maize. In this method without ploughing, sowing of pea may be done to use moisture of rice field and straw of rice as organic manure. Taking into account the rainfall recorded during last week, this technology is very suitable for harvested *Jhum* rice field.

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
FIELD CROPS			
Rice	Dough Grain filling stage	Gundhi bug	<ul style="list-style-type: none"> <li>Monitor crop against attack of gundhi bug,</li> <li>Weeding is advised to ward off the alternate host of gundhi bug</li> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li> <li>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</li> </ul>
Pulses	Flowering	Blister beetle	<ul style="list-style-type: none"> <li>Go for manual picking of Blister beetle without delay because the incidence of the pest during flowering stage cause huge lose in harvest</li> </ul>
VEGETABLES			
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li> <li><b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with Trichoderma @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li> <li><b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li> <li>Weeding of the standing crop may be done,</li> <li>Monitoring of standing crops against attack of insect pests and diseases.</li> </ul>
Cucurbits (Bottle gourd,Ridge gourd, Pumpkin, Bitter gourd, Cucumber, etc.)	Harvesting	Aphid/ Red pumpkin beetle/ Cutworm	<ul style="list-style-type: none"> <li>On clear/dry weather, Spraying of Dimethoate 30 EC @ 3ml/litre of water is advised against aphids,</li> <li>On clear/dry weather, Spraying of Deltamethrin 4ml/10 litre of water is advised for management of Red pumpkin beetle grass,</li> <li>Drench the base with chlorpyrifos 20EC @ 2ml/litre; 1litre per plant.</li> </ul>
Tomato	Fruiting		<ul style="list-style-type: none"> <li>Removing sideshoots is an important job which prevents the fruits being shaded by leaves.</li> <li>Provide shed to protect from excessive rainfall</li> </ul>
HORTICULTURAL CROPS			
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker</li> <li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li> <li><b><u>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</u></b></li> </ul>
Guava	Fruit Development	Fruit fly	<ul style="list-style-type: none"> <li>Basin cleaning and manuring</li> <li>Install fruit fly pheromone traps for collection and destruction of the adult insects</li> </ul>
Banana	Fruiting/ Ripening		<ul style="list-style-type: none"> <li>Cover bunches with banana bunch covers or sacks or locally available materials to protect against sunscald, birds and insects.</li> </ul>
Pineapple	Harvesting		<ul style="list-style-type: none"> <li>The fruit must be harvested with crown (whorl of leaves attached to the apical end of the fruit) to prolong the</li> </ul>

			freshness of fruit and avoid microbial attack.
Ginger/Turmeric	Active vegetative		<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> </ul>
<b>Honey Bees</b>			
Honey bees			<ul style="list-style-type: none"> <li>Provide sugar syrup near the box</li> <li>Add insulation and ventilation systems</li> </ul>
<b>LIVESTOCKS</b>			
<b>Livestock</b>	<b>Stage</b>	<b>Disease</b>	<b>Precautionary Practices to be followed</b>
<b>General</b> <ul style="list-style-type: none"> <li><b>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</b></li> <li><b>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</b></li> </ul>			
Goat	All stages		<ul style="list-style-type: none"> <li>Deworming for gastrointestinal parasite</li> </ul>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>Reduce concentrate diet up to 5%</li> <li>Provide adequate potable water</li> <li><b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Fishery			<ul style="list-style-type: none"> <li>Application of quick lime is highly recommended in order to rectify water pH.</li> <li>Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li><b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>Proper ventilation of shed</li> <li>Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>Avoid overcrowding.</li> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>Vaccination as per the schedule with proper consultation with vet. <ul style="list-style-type: none"> <li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days: F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul> </li> <li>Remove wet litter</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li><u><b>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</b></u></li> <li>Provide UMB/Molases if possible in the feed</li> <li>Provide 10-30 ml of vitamin B-Complex in feed</li> <li><b>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</b></li> <li><b>Separate sick animals</b></li> <li>The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

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Agrometeorological Field Unit  
ICAR, BASAR

# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा

GRAMIN KRISHI MAUSAM SEWA

(Integrated Agro-Meteorological Advisory Services)



AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: Lower Dibang Valley**

No: 78/2017/Fri

Dated: 29<sup>th</sup> September, 2017



Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Rainfall = 0.3 mm (Roing) (up to 26 <sup>th</sup> Sept)	Mostly cloudy with possibility of very light/moderate rainfall. Daily maximum and minimum temperature for the following period is predicted to be 25-26°C and 22°C respectively. Expected morning and evening relative humidity will be 78-84% and 53-69% respectively. Wind direction is mainly E with speed range of 4 kmph.
Warning:	•

### Weather Based Agro-meteorological Advisories Bulletin

#### General Recommendations

- Disinfecting the animal/bird sheds with lime powder/ bleaching powder/ 4%NaOH at regular interval is advocated
- Spraying operation should be done only on dry/clear weather
- Go for low cost polyhouses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing



It is advised that farmers may use zero tillage technology in harvested paddy fields in upland/Jhum for sowing of Pea/maize. In this method without ploughing, sowing of pea may be done to use moisture of rice field and straw of rice as organic manure. Taking into account the rainfall recorded during last week, this technology is very suitable for harvested *Jhum* rice field.

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
FIELD CROPS			
Rice	Dough Grain filling stage	Gundhi bug	<ul style="list-style-type: none"> <li>Monitor crop against attack of gundhi bug,</li> <li>Weeding is advised to ward off the alternate host of gundhi bug</li> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyrifhos@1-2ml/lit.</li> <li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li> </ul>
Groundnut	Pegging	Leaf Spot/tikka disease	<ul style="list-style-type: none"> <li>On sunny day, spray carbendazim/Mancozeb @ 1-2 ml/lit of water</li> <li>Do not disturb the soil structure by spading/hoeing in the field.</li> <li>Hand weeding with care is recommended.</li> </ul>
Pulses	Flowering	Blister beetle	<ul style="list-style-type: none"> <li>Go for manual picking of Blister beetle without delay because the incidence of the pest during flowering stage cause huge lose in harvest</li> </ul>
VEGETABLES			
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li> <li><b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with Trichoderma @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li> <li><b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li> <li><b>Weeding of the standing crop may be done,</b></li> <li><b>Monitoring of standing crops against attack of insect pests and diseases.</b></li> </ul>
Cucurbits (Bottle gourd,Ridge gourd, Pumpkin, Bitter gourd, Cucumber, etc.)	Harvesting	Aphid/ Red pumpkin beetle/ Cutworm	<ul style="list-style-type: none"> <li>On clear/dry weather, Spraying of Dimethoate 30 EC @ 3ml/litre of water is advised against aphids,</li> <li>On clear/dry weather, Spraying of Deltamethrin 4ml/10 litre of water is advised for management of Red pumpkin beetle grass,</li> <li>Drench the base with chlorpyrifos 20EC @ 2ml/litre; 1litre per plant.</li> </ul>
HORTICULTURAL CROPS			
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker</li> <li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li> <li><b>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</b></li> </ul>
Guava	Fruit Development	Fruit fly	<ul style="list-style-type: none"> <li>Basin cleaning and manuring</li> <li>Install fruit fly pheromone traps for collection and destruction of the adult insects</li> </ul>
Banana	Fruiting/ Ripening		<ul style="list-style-type: none"> <li>Cover bunches with banana bunch covers or sacks or locally available materials to protect against sunscald, birds and insects.</li> </ul>

Pineapple	Harvesting		<ul style="list-style-type: none"> <li>The fruit must be harvested with crown (whorl of leaves attached to the apical end of the fruit) to prolong the freshness of fruit and avoid microbial attack.</li> </ul>
Large Cardamom	Flowering stage	Chirkey Disease (fungal infection) & Chirke and Foorkey (virus infection)	<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Remove diseased part &amp; keep inflorescence clean.</li> <li>Uproot &amp; burn virus infected plants</li> </ul>
Orchards			<ul style="list-style-type: none"> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
<b>Honey Bees</b>			
Honey bees			<ul style="list-style-type: none"> <li>Box must be covered with straw/dry leaves to provide warmth</li> </ul>
<b>LIVESTOCKS</b>			
<b>Livestock</b>	<b>Stage</b>	<b>Disease</b>	<b>Precautionary Practices to be followed</b>
<b>General</b> <ul style="list-style-type: none"> <li>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</li> <li>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</li> </ul>			
Goat	All stages		<ul style="list-style-type: none"> <li>Deworming for gastrointestinal parasite</li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li><b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>Proper ventilation of shed</li> <li>Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>Avoid overcrowding.</li> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>Vaccination as per the schedule with proper consultation with vet. <ul style="list-style-type: none"> <li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days: F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul> </li> <li>Remove wet litter</li> </ul>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul style="list-style-type: none"> <li>Keep the houses dry and clean.</li> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>Reduce concentrate diet up to 5%</li> <li>Provide adequate potable water</li> </ul>
Fishery			<ul style="list-style-type: none"> <li>Application of quick lime is highly recommended in order to rectify water pH.</li> <li>Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li><u>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</u></li> <li>Provide UMB/Molases if possible in the feed</li> <li>Provide 10-30 ml of vitamin B-Complex in feed</li> <li>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</li> <li>Separate sick animals</li> <li>The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>
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# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा



**GRAMIN KRISHI MAUSAM SEWA**  
(Integrated Agro-Meteorological Advisory Services)



AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: Lower Subansiri**

**No: 78/2017/Fri**

**Dated: 29<sup>th</sup> September, 2017**



Weather summery of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Rainfall = NA	Mostly cloudy with possibility of light/moderate rainfall. Daily maximum and minimum temperature for the following period is predicted to be 25-26°C and 22°C respectively. Expected morning and evening relative humidity will be 96-97% and 72-87% respectively. Wind direction is mainly WSW & W with speed range of 2-3 kmph.
Warning:	•

### Weather Based Agro-meteorological Advisories Bulletin

- Disinfecting the animal/bird sheds with lime powder/ bleaching powder/ 4%NaOH at regular interval is advocated
- Spraying operation should be done only on dry/clear weather
- Go for low cost polyhouses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing

It is advised that farmers may use zero tillage technology in harvested paddy fields in upland/Jhum for sowing of Pea/maize. In this method without ploughing, sowing of pea may be done to use moisture of rice field and straw of rice as organic manure. Taking into account the rainfall recorded during last week, this technology is very suitable for harvested *Jhum* rice field.

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
<b>FIELD CROPS</b>			
Rice	Dough Grain filling stage	Gundhi bug	<ul style="list-style-type: none"> <li>Monitor crop against attack of gundhi bug,</li> <li>Weeding is advised to ward off the alternate host of gundhi bug</li> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li> <li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li> </ul>
Groundnut	Pegging	Leaf Spot/tikka disease	<ul style="list-style-type: none"> <li>On sunny day, spray carbendazim/Mancozeb @ 1-2 ml/lit of water</li> <li>Do not disturb the soil structure by spading/hoeing in the field.</li> <li>Hand weeding with care is recommended.</li> </ul>
Pulses	Flowering	Blister beetle	<ul style="list-style-type: none"> <li>Application of fertilizers and spray operations to be delayed/avoided</li> <li>Go for manual picking of Blister beetle without delay because the incidence of the pest during flowering stage cause huge lose in harvest</li> </ul>
<b>VEGETABLES</b>			
Okra	Maturing	Pod borer	<ul style="list-style-type: none"> <li>Harvesting and marketing of tender okra fruits,</li> <li>Collection and destruction of borer damaged pod,</li> </ul>
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li> <li><b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with <i>Trichoderma</i> @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li> <li><b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li> <li>Weeding of the standing crop may be done,</li> <li>Monitoring of standing crops against attack of insect pests and diseases.</li> </ul>
Ginger/turmeric	Vegetative stage	Rhizome rot	<ul style="list-style-type: none"> <li><b><u>Under excessive moisture, there is every possibility of rhizome rot in ginger and turmeric. To manage the disease, provide adequate drainage and apply <i>Trichoderma harzianum</i> @ 50 g/bed along with FYM/ neem cake.</u></b></li> <li>Provide adequate drainage to prevent water stagnation and apply <i>Trichoderma harzianum</i> @50 g/bed along with FYM/neem cake.</li> <li>Mulching should be done with locally available mulch,</li> <li>Earthing up of exposed rhizome,</li> </ul>
<b>HORTICULTURAL CROPS</b>			
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with streptocycline 6 gms in 60 liters of water to control canker</li> <li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li> <li><b><u>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</u></b></li> </ul>

Guava	Fruit Development	Fruit fly	<ul style="list-style-type: none"> <li>Basin cleaning and manuring</li> <li>Install fruit fly pheromone traps for collection and destruction of the adult insects</li> </ul>
Banana	Fruiting/Ripening		<ul style="list-style-type: none"> <li>Cover bunches with banana bunch covers or sacks or locally available materials to protect against sunscald, birds and insects.</li> </ul>
Kiwi	Vegetative		<ul style="list-style-type: none"> <li>Manuring with well decomposed FYM@15kg/plant followed by mulching with paddy straw.</li> </ul>
Pineapple	Fruiting/Harvesting		<ul style="list-style-type: none"> <li>The fruit must be harvested with crown (whorl of leaves attached to the apical end of the fruit) to prolong the freshness of fruit and avoid microbial attack.</li> </ul>
Ginger/Turmeric	Seedling		<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Proper drainage to be done and avoid water stagnation</li> <li></li> </ul>
Large Cardamom	Flowering stage	Chirkey Disease (fungal infection) & Chirke and Foorkey (virus infection)	<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Remove diseased part &amp; keep inflorescence clean. .</li> <li>Uproot &amp; burn virus infected plants</li> </ul>
Orchards			<ul style="list-style-type: none"> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
<b>Agroforestry</b>			
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings
<b>Honey Bees</b>			
Honey bees			<ul style="list-style-type: none"> <li>Box must be covered with straw/dry leaves to provide warmth</li> </ul>
<b>LIVESTOCKS</b>			
<b>Livestock</b>	<b>Stage</b>	<b>Disease</b>	<b>Precautionary Practices to be followed</b>
<b>General</b>			
<ul style="list-style-type: none"> <li><b>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</b></li> <li><b>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</b></li> </ul>			
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>Reduce concentrate diet up to 5%</li> <li>Provide adequate potable water</li> <li><b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li><b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>Proper ventilation of shed</li> <li>Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>Avoid overcrowding.</li> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>Vaccination as per the schedule with proper consultation with vet. <ul style="list-style-type: none"> <li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days:</li> <li>F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days:</li> <li>F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul> </li> <li>Remove wet litter</li> </ul>
Fishery			<ul style="list-style-type: none"> <li>Application of quick lime is highly recommended in order to rectify water pH.</li> <li>Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li><b><u>In present weather conditions, special care should be taken</u></b></li> </ul>



			<u>against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</u> <ul style="list-style-type: none"><li>• Provide UMB/Molases if possible in the feed</li><li>• Provide 10-30 ml of vitamin B-Complex in feed</li><li>• <b>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</b></li><li>• <b>Separate sick animals</b></li><li>• The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li><li>• Long hair near the udder/stomach/back legs should be teamed short.</li></ul>
Mithun		FMD	<ul style="list-style-type: none"><li>• Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route.</li><li>• Pregnant animals above 7 months of pregnancy should be avoided.</li></ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

Issued jointly by ICAR-RC for NEH Region, Arunachal Pradesh Centre, Basar and India Meteorological Department  
Contact: - [IAAS.BASAR@gmail.com](mailto:IAAS.BASAR@gmail.com), Phone Number: - 03795-226247/37, -96 (Fax)

Agrometeorological Field Unit  
ICAR, BASAR

# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा

GRAMIN KRISHI MAUSAM SEWA

(Integrated Agro-Meteorological Advisory Services)



AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: Papum Pare**

No: 78/2017/Fri

Dated: 29<sup>th</sup> September, 2017



Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Rainfall: 50.4 mm; T. Max: 34.0°C; T. Min: 23.0°C ; RH: 77-97% (up to 26 <sup>th</sup> Sept)	<b>Mostly cloudy with possibility of very light/moderate rainfall.</b> Daily maximum and minimum temperature for the following period is predicted to be 28-32°C and 22-23°C respectively. Expected morning and evening relative humidity will be 89-93% and 64-79% respectively. Expected wind direction is variable with speed range of 2-4 kmph.
<b>Warning:</b>	•

### Weather Based Agro-meteorological Advisories Bulletin

#### General Recommendations

- Disinfecting the animal/bird sheds with lime powder/ bleaching powder/ 4%NaOH at regular interval is advocated
- Spraying operation should be done only on dry/clear weather
- Go for low cost polyhouses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing

It is advised that farmers may use zero tillage technology in harvested paddy fields in upland/Jhum for sowing of Pea/maize. In this method without ploughing, sowing of pea may be done to use moisture of rice field and straw of rice as organic manure. Taking into account the rainfall recorded during last week, this technology is very suitable for harvested *Jhum* rice field.

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
FIELD CROPS			
Rice	Dough Grain filling stage	Gundhi bug	<ul style="list-style-type: none"> <li>Monitor crop against attack of gundhi bug,</li> <li>Weeding is advised to ward off the alternate host of gundhi bug</li> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li> <li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li> </ul>
Pulses	Flowering	Blister beetle	<ul style="list-style-type: none"> <li>Go for manual picking of Blister beetle without delay because the incidence of the pest during flowering stage cause huge lose in harvest</li> </ul>
Maize	Fruiting	Grasshopper	<ul style="list-style-type: none"> <li><b>Grasshopper infestation: Bund racking followed by incorporation of Carbofuron 3G</b></li> </ul>
VEGETABLES			
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li> <li><b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with Trichoderma @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li> <li><b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li> <li><b>Weeding of the standing crop may be done,</b></li> <li><b>Monitoring of standing crops against attack of insect pests and diseases.</b></li> </ul>
Cucurbits (Bottle gourd,Ridge gourd, Pumpkin, Bitter gourd, Cucumber, etc.)	Harvesting	Aphid/ Red pumpkin beetle/ Cutworm	<ul style="list-style-type: none"> <li>On clear/dry weather, Spraying of Dimethoate 30 EC @ 3ml/litre of water is advised against aphids,</li> <li>On clear/dry weather, Spraying of Deltamethrin 4ml/10 litre of water is advised for management of Red pumpkin beetle grass,</li> <li>Drench the base with chlorpyrifos 20EC @ 2ml/litre; 1litre per plant.</li> </ul>
Tomato	Fruiting		<ul style="list-style-type: none"> <li>Removing sideshoots is an important job which prevents the fruits being shaded by leaves.</li> <li>Provide shed to protect from excessive rainfall</li> </ul>
Summer Vegetables	Multiple stages		<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Use pheromone traps/light traps against brinjal shoot and fruit borer.</li> <li>New nursery should be raised inside well covered structure with a raised bed to protect against continuous rain/shower.</li> </ul>
Ginger/turmeric	Vegetative stage	Soft Rot	<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Cultural practice like weeding/earthing up is recommended followed by basal dose of fertilizers</li> <li>For management of soft rot in ginger: Need based drenching of Metalaxyl-8% + Mancozeb 64% WP @ 2.5 g per lit of water.</li> </ul>
HORTICULTURAL CROPS			

Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker</li> <li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li> <li><b>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</b></li> </ul>
Guava	Fruit Development	Fruit fly	<ul style="list-style-type: none"> <li>Basin cleaning and manuring</li> <li>Install fruit fly pheromone traps for collection and destruction of the adult insects</li> </ul>
Pineapple	Fruiting/Harvesting		<ul style="list-style-type: none"> <li>The fruit must be harvested with crown (whorl of leaves attached to the apical end of the fruit) to prolong the freshness of fruit and avoid microbial attack.</li> </ul>
Banana	Fruiting/Ripening		<ul style="list-style-type: none"> <li>Cover bunches with banana bunch covers or sacks or locally available materials to protect against sunscald, birds and insects.</li> </ul>
Ginger/Turmeric	Seedling		<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Proper drainage to be done and avoid water stagnation</li> <li>Earthing up of ginger/turmeric along with basal application of required fertilizer should be done</li> </ul>
Large Cardamom	Flowering stage	Chirkey Disease (fungal inection) & Chirke and Foorkey (virus infection)	<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Remove diseased part &amp; keep inflorescence clean.</li> <li>Uproot &amp; burn virus infected plants</li> </ul>
Orchards			<ul style="list-style-type: none"> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
<b>Honey Bees</b>			
Honey bees			<ul style="list-style-type: none"> <li>Box must be covered with straw/dry leaves to provide warmth</li> </ul>
<b>LIVESTOCKS</b>			
<b>Livestock</b>	<b>Stage</b>	<b>Disease</b>	<b>Precautionary Practices to be followed</b>
<b>General</b>			
<ul style="list-style-type: none"> <li><b>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</b></li> <li><b>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</b></li> </ul>			
Goat	All stages		<ul style="list-style-type: none"> <li>Deworming for gastrointestinal parasite</li> </ul>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>Reduce concentrate diet up to 5%</li> <li>Provide adequate potable water</li> <li><b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li><b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>Proper ventilation of shed</li> <li>Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>Avoid overcrowding.</li> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>Vaccination as per the schedule with proper consultation with vet.</li> <li>Day old chick: HVT Marek disease vaccine, 4-7 days: F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days:</li> </ul>

			<p>F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</p> <ul style="list-style-type: none"> <li>Remove wet litter</li> </ul>
Fishery			<ul style="list-style-type: none"> <li>Application of quick lime is highly recommended in order to rectify water pH.</li> <li>Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li><b><u>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</u></b></li> <li>Provide UMB/Molases if possible in the feed</li> <li>Provide 10-30 ml of vitamin B-Complex in feed</li> <li>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</li> <li>Separate sick animals</li> <li>The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>
Mithun		FMD	<ul style="list-style-type: none"> <li>Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route.</li> <li>Pregnant animals above 7 months of pregnancy should be avoided.</li> </ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

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Agrometeorological Field Unit  
ICAR, BASAR

# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा



**GRAMIN KRISHI MAUSAM SEWA**  
(Integrated Agro-Meteorological Advisory Services)



AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: Tawang**

**No: 78/2017/Fri**

**Dated: 29<sup>th</sup> September, 2017**



Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Rainfall = 30.2 mm (up to 26 <sup>th</sup> Sept)	Mostly cloudy with possibility of light/moderate rainfall. Daily maximum and minimum temperature for the following period is predicted to be 18-19°C and 08-12°C respectively. Expected morning and evening relative humidity will be 89-93% and 62-76% respectively. Wind direction is mainly ESE & SE with probable speed range of 2-6 kmph.
<b>Warning:</b>	•

### Weather Based Agro-meteorological Advisories Bulletin

#### General Recommendations

- Disinfecting the animal/bird sheds with lime powder/ bleaching powder/ 4%NaOH at regular interval is advocated
- All spraying operation should be done only on dry/clear weather
- Go for low cost polyhouses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing



Crop	Stage	Pest/Disease	Precautionary Practices to be followed
<b>FIELD CROPS</b>			
Rice	Panicle initiation/ Dough Grain filling stage	Gundhi bug/ leaf folder/ rice skipper	<ul style="list-style-type: none"> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li> <li>Maintain periphery of nursery field weed free and clean to prevent disease and pest harboring in weeds.</li> <li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li> </ul>
<b>VEGETABLES</b>			
Cauliflower /Cabbage	Nursery Preparation	Cut worm	<ul style="list-style-type: none"> <li>Maintain proper moisture level in the nursery.</li> <li>Nursery preparation for early cruciferous crops may be done in raised bed (Preferable in shaded area),</li> <li>Due to wet environment there is possibility of attack of Cut worm. If infestation is very high, to protect the seedlings apply Carbaryl (Sevin) 5% as bait @ 10 kg per acre</li> </ul>
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><u>In present weather conditions, raising nursery of hybrid tomato, cauliflower and cabbage may be done. The seeds should be sown on raised bed (15-20 cm) after treating with <i>Trichoderma</i> @ 10 g/kg are with Captan/Thiram @ 3 g/kg seeds. After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></li> </ul>
Okra	Maturing	Pod borer	<ul style="list-style-type: none"> <li>Harvesting and marketing of tender okra fruits,</li> <li>Collection and destruction of borer damaged pod,</li> </ul>
Ginger/turmeric	Vegetative stage	Rhizome rot	<ul style="list-style-type: none"> <li><b><u>Under excessive moisture, there is every possibility of rhizome rot in ginger and turmeric. To manage the disease, provide adequate drainage and apply <i>Trichoderma harzianum</i> @ 50 g/bed along with FYM/ neem cake.</u></b></li> <li>Provide adequate drainage to prevent water stagnation and apply <i>Trichoderma harzianum</i> @50 g/bed along with FYM/neem cake.</li> <li>Mulching should be done with locally available mulch,</li> <li>Earthing up of exposed rhizome,</li> </ul>
<b>HORTICULTURAL CROPS</b>			
Citrus	Fruit development stage	Citrus Canker	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with streptocycline 6 gms in 60 liters of water to control canker</li> <li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li> </ul>
Kiwi	Vegetative		<ul style="list-style-type: none"> <li>Manuring with well decomposed FYM@15kg/plant followed by mulching with paddy straw.</li> </ul>
Large Cardamom	Flowering stage	Chirkey Disease (fungal infection) & Chirke and Foorkey (virus infection)	<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Remove diseased part &amp; keep inflorescence clean.</li> <li>Uproot &amp; burn virus infected plants</li> </ul>
Ginger/Turmeric	Seedling		<ul style="list-style-type: none"> <li>Proper drainage to be done and avoid water stagnation</li> <li>Earthing up of ginger/turmeric along with basal application of required fertilizer should be done</li> </ul>
Orchards			<ul style="list-style-type: none"> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
<b>Honey Bees</b>			
Honey bees			<ul style="list-style-type: none"> <li>Provide sugar syrup near the box</li> <li>Add insulation and ventilation systems</li> </ul>

LIVESTOCKS			
Livestock	Stage	Disease	Precautionary Practices to be followed
<b>General</b> <ul style="list-style-type: none"> <li>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</li> <li>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</li> </ul>			
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>Reduce concentrate diet up to 5%</li> <li>Provide adequate potable water</li> <li><b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Fishery			<ul style="list-style-type: none"> <li>Application of quick lime is highly recommended in order to rectify water pH.</li> <li>Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li><b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>Proper ventilation of shed</li> <li>Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>Avoid overcrowding.</li> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>Vaccination as per the schedule with proper consultation with vet. <ul style="list-style-type: none"> <li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days: F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul> </li> <li>Remove wet litter</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li><u><b>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</b></u></li> <li>Provide UMB/Molases if possible in the feed</li> <li>Provide 10-30 ml of vitamin B-Complex in feed</li> <li><b>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</b></li> <li><b>Separate sick animals</b></li> <li>The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>
Mithun		FMD	<ul style="list-style-type: none"> <li>Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route.</li> <li>Pregnant animals above 7 months of pregnancy should be avoided.</li> </ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

Issued jointly by ICAR-RC for NEH Region, Arunachal Pradesh Centre, Basar and India Meteorological Department  
Contact: - [IAAS.BASAR@gmail.com](mailto:IAAS.BASAR@gmail.com), Phone Number: - 03795-226247/37, -96 (Fax)

Agrometeorological Field Unit  
ICAR, BASAR

# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा



**GRAMIN KRISHI MAUSAM SEWA**  
(Integrated Agro-Meteorological Advisory Services)



AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: Tirap**

**No: 78/2017/Fri**

**Dated: 29<sup>th</sup> September, 2017**



Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Rainfall = 44.8 mm (up to 26 <sup>th</sup> Sept)	Mostly cloudy with possibility of light/moderate rainfall. Daily maximum and minimum temperature for the following period is predicted to be 28-32°C and 22-23 respectively. Expected morning and evening relative humidity will be 95-98% and 83-93% respectively. Wind direction is mainly S with speed range of 2 kmph.
Warning:	•

### Weather Based Agro-meteorological Advisories Bulletin

- Disinfecting the animal/bird sheds with lime powder/ bleaching powder/ 4%NaOH at regular interval is advocated.
- Go for low cost polyhouses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing

It is advised that farmers may use zero tillage technology in harvested paddy fields in upland/Jhum for sowing of Pea/maize. In this method without ploughing, sowing of pea may be done to use moisture of rice field and straw of rice as organic manure. Taking into account the rainfall recorded during last week, this technology is very suitable for harvested *Jhum* rice field.

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
FIELD CROPS			
Rice (WRC) Early sown crop	Booting & grain filling	Gundhi bug	<ul style="list-style-type: none"> <li>On clear/dry weather, dust with Malathion 5D @ 20kg/ha. Repeat weekly,</li> <li>Properly maintain the water level in the field,</li> </ul>
Pulses	Flowering	Blister beetle	<ul style="list-style-type: none"> <li>Go for manual picking of Blister beetle without delay because the incidence of the pest during flowering stage cause huge lose in harvest</li> </ul>
Rice	Dough Grain filling stage	Gundhi bug	<ul style="list-style-type: none"> <li>Monitor crop against attack of gundhi bug,</li> <li>Weeding is advised to ward off the alternate host of gundhi bug</li> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li> <li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li> </ul>
VEGETABLES			
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li> <li><b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with <i>Trichoderma</i> @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li> <li><b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li> <li><b>Weeding of the standing crop may be done,</b></li> <li><b>Monitoring of standing crops against attack of insect pests and diseases.</b></li> </ul>
Tomato	Fruiting		<ul style="list-style-type: none"> <li>Removing sideshoots is an important job which prevents the fruits being shaded by leaves.</li> <li>Provide shed to protect from excessive rainfall</li> </ul>
Summer Vegetables	Multiple stages		<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Use pheromone traps/light traps against brinjal shoot and fruit borer.</li> <li>New nursery should be raised inside well covered structure with a raised bed to protect against continuous rain/shower.</li> </ul>
Ginger/turmeric	Vegetative stage	Soft Rot	<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Cultural practice like weeding/earthing up is recommended followed by basal dose of fertilizers</li> <li>For management of soft rot in ginger: Need based drencing of Metalaxyl-8% + Mancozeb 64% WP @ 2.5 g per lit of water.</li> </ul>
HORTICULTURAL CROPS			
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker</li> <li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li> <li><b>Incorporate Clothianidin 50 WDG @ 4gm/plant in base</b></li> </ul>

			<b>region of the plant against soot grab.</b>
Guava	Fruit Development	Fruit fly	<ul style="list-style-type: none"> <li>Basin cleaning and manuring</li> <li>Install fruit fly pheromone traps for collection and destruction of the adult insects</li> </ul>
Banana	Fruiting/Ripening		<ul style="list-style-type: none"> <li>Cover bunches with banana bunch covers or sacks or locally available materials to protect against sunscald, birds and insects.</li> </ul>
Large Cardamom	Flowering stage	Chirkey Disease (fungal inection) & Chirke and Foorkey (virus infection)	<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Remove diseased part &amp; keep inflorescence clean.</li> <li>Uproot &amp; burn virus infected plants</li> </ul>
Pineapple	Active vegetative		<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> </ul>
Orchards			<ul style="list-style-type: none"> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
<b>Honey Bees</b>			
			<ul style="list-style-type: none"> <li>Box must be covered with straw/dry leaves to provide warmth</li> </ul>
<b>LIVESTOCKS</b>			
<b>Livestock</b>	<b>Stage</b>	<b>Disease</b>	<b>Precautionary Practices to be followed</b>
<b>General</b> <ul style="list-style-type: none"> <li><b>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</b></li> <li><b>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</b></li> </ul>			
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>Reduce concentrate diet up to 5%</li> <li>Provide adequate potable water</li> <li><b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li><b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>Proper ventilation of shed</li> <li>Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>Avoid overcrowding.</li> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>Vaccination as per the schedule with proper consultation with vet. <ul style="list-style-type: none"> <li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days: F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul> </li> <li>Remove wet litter</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li><b><u>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</u></b></li> <li>Provide UMB/Molases if possible in the feed</li> <li>Provide 10-30 ml of vitamin B-Complex in feed</li> <li><b>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</b></li> <li><b>Separate sick animals</b></li> <li>The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>

Fishery			<ul style="list-style-type: none"><li>• Application of quick lime is highly recommended in order to rectify water pH.</li><li>• Application of fish feed (mustard oil cake) is essential for achieving higher yield</li></ul>
Mithun		FMD	<ul style="list-style-type: none"><li>• Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route.</li><li>• Pregnant animals above 7 months of pregnancy should be avoided.</li></ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

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**Agrometeorological Field Unit**  
**ICAR, BASAR**



# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा



**GRAMIN KRISHI MAUSAM SEWA**  
(Integrated Agro-Meteorological Advisory Services)



ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: Upper Siang**

**No: 78/2017/Fri**

**Dated: 29<sup>th</sup> September, 2017**



Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Rainfall = NA	<b>Mostly/partly cloudy with possibility of light/moderate rainfall.</b> Daily maximum and minimum temperature for the following period is predicted to be 21-22°C and 13-15°C respectively. Expected morning and evening relative humidity will be 79-87% and 55-74% respectively. Wind direction is mainly SSE & ESE with speed range of 2-4 kmph.
<b>Warning:</b>	•

### Weather Based Agro-meteorological Advisories Bulletin

#### General Recommendations

- Disinfecting the animal/bird sheds with lime powder/bleaching powder/4%NaOH at regular interval is advocated
- Spraying operation should be done only on dry/clear weather
- Go for low cost poly-houses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
FIELD CROPS			
Rice	Panicle initiation/ Dough Grain filling stage	Gundhi bug/ leaf folder/ rice skipper	<ul style="list-style-type: none"><li>• Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li><li>• Maintain periphery of nursery field weed free and clean to prevent disease and pest harboring in weeds.</li><li>• <b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li></ul>
Groundnut	Pegging	Leaf Spot/tikka disease	<ul style="list-style-type: none"><li>• On sunny day, spray carbendazim/Mancozeb @ 1-2 ml/lit of water</li><li>• Do not disturb the soil structure by spading/hoeing in the field.</li><li>• Hand weeding with care is recommended.</li></ul>
Maize	Fruiting	Grasshopper	<ul style="list-style-type: none"><li>• <b>Grasshopper infestation: Bund racking followed by incorporation of Carbofuron 3G</b></li></ul>
Pulses/Ground nut	Vegetative stage	Epicauta Bettle	<ul style="list-style-type: none"><li>• Gap filling is recommended in the early sown crop</li><li>• Manual weeding in greengram/blackgram</li></ul>
VEGETABLES			
Rabi vegetables	Nursery		<ul style="list-style-type: none"><li>• <b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li><li>• <b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with Trichoderma @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li><li>• <b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li><li>• <b>Weeding of the standing crop may be done,</b></li><li>• <b>Monitoring of standing crops against attack of insect pests and diseases.</b></li></ul>
Okra	Maturing	Pod borer	<ul style="list-style-type: none"><li>• Harvesting and marketing of tender okra fruits,</li><li>• Collection and destruction of borer damaged pod,</li></ul>
Ginger/turmeric	Vegetative stage	Rhizome rot	<ul style="list-style-type: none"><li>• <b><u>Under excessive moisture, there is every possibility of rhizome rot in ginger and turmeric. To manage the disease, provide adequate drainage and apply Trichoderma harzianum @ 50 g/bed along with FYM/ neem cake.</u></b></li><li>• Provide adequate drainage to prevent water stagnation and apply Trichoderma harzianum @50 g/bed along with FYM/neem cake.</li><li>• Mulching should be done with locally available mulch,</li><li>• Earthing up of exposed rhizome,</li></ul>
HORTICULTURAL CROPS			
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"><li>• Undertake necessary tillage operation if there is no rain.</li><li>• Remove weeds from the tree basin and prepare ring around the tree.</li><li>• Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker</li><li>• Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li><li>• <b>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</b></li></ul>
Kiwi	Vegetative		<ul style="list-style-type: none"><li>• Manuring with well decomposed FYM@15kg/plant followed by mulching with paddy straw.</li></ul>
Pineapple	Active vegetative		<ul style="list-style-type: none"><li>• Mulching with locally available materials like dry grass/paddy straw recommended Remove excess suckers</li></ul>
Banana	Bunching & planting		<ul style="list-style-type: none"><li>• Desuckering of banana to be done leaving one suckers per plant to maintain the health of mother plant.</li><li>• Remove the male flower in banana bunches to attain better finger/fruit size.</li><li>• Remove excess sucker from Banana in mother plant and give support in banana bunches to protect falling due to</li></ul>

			heavy weight or storm.
Ginger/Turmeric	Seedling		<ul style="list-style-type: none"> <li>• Proper drainage to be done and avoid water stagnation</li> <li>• Earthing up of ginger/turmeric along with basal application of required fertilizer should be done</li> </ul>
<b>Honey Bees</b>			
Honey bees			<ul style="list-style-type: none"> <li>• Box must be covered with straw/dry leaves to provide warmth</li> <li>• Provide sugar syrup</li> </ul>
<b>LIVESTOCKS</b>			
<b>Livestock</b>	<b>Stage</b>	<b>Disease</b>	<b>Precautionary Practices to be followed</b>
<b>General</b> <ul style="list-style-type: none"> <li>• <b>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</b></li> <li>• <b>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</b></li> </ul>			
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>• Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>• 1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>• Reduce concentrate diet up to 5%</li> <li>• Provide adequate potable water</li> <li>• <b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li>• <b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>• Proper ventilation of shed</li> <li>• Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>• Avoid overcrowding.</li> <li>• Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>• Vaccination as per the schedule with proper consultation with vet. <ul style="list-style-type: none"> <li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days:</li> <li>F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days:</li> <li>F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul> </li> <li>• Remove wet litter</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li>• <u><b>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</b></u></li> <li>• Provide UMB/Molases if possible in the feed</li> <li>• Provide 10-30 ml of vitamin B-Complex in feed</li> <li>• 1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</li> <li>• Separate sick animals</li> <li>• The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>• Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>
Fishery			<ul style="list-style-type: none"> <li>• Application of quick lime is highly recommended in order to rectify water pH.</li> <li>• Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Mithun		FMD	<ul style="list-style-type: none"> <li>• Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route.</li> <li>• Pregnant animals above 7 months of pregnancy should be avoided.</li> </ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

**Agrometeorological Field Unit**  
**ICAR, BASAR**

# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा



**GRAMIN KRISHI MAUSAM SEWA**  
(Integrated Agro-Meteorological Advisory Services)

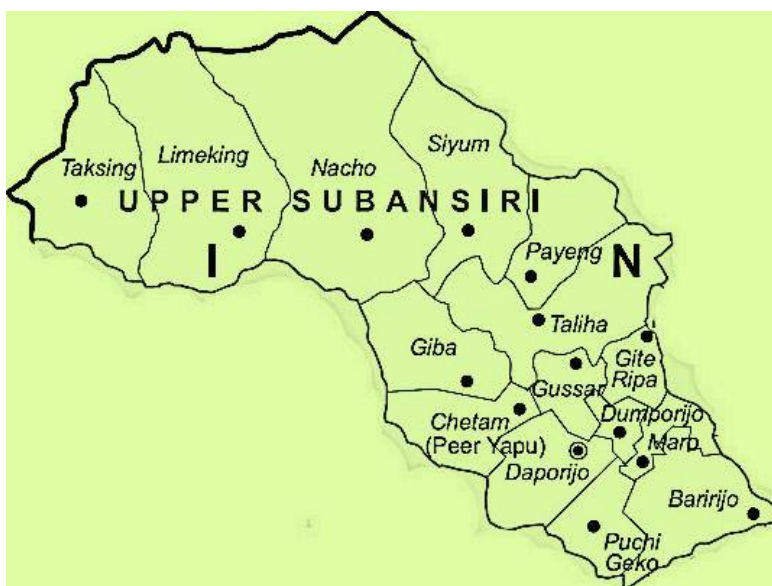


AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: Upper Subansiri**

**No: 78/2017/Fri**

**Dated: 29<sup>th</sup> September, 2017**



Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Daporijo: 15.8 mm (up to 26 <sup>th</sup> Sept)	Mostly cloudy with possibility of moderate to rather heavy rainfall. Daily maximum and minimum temperature for the following period is predicted to be 22-26°C and 22°C respectively. Expected morning and evening relative humidity will be 96-98% and 69-91% respectively. Expected wind direction mainly W & NW with speed range of 2-4 kmph.
<b>Warning</b>	•

### Weather Based Agro-meteorological Advisories Bulletin

- Disinfecting the animal/bird sheds with lime powder/ bleaching powder/ 4%NaOH at regular interval is advocated
- Avoid spray of insecticides during flowering stage as it may hinder pollination by honey bees and other insects.
- Spraying operation should be done only on dry/clear weather
- Go for low cost polyhouses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
<b>FIELD CROPS</b>			
Rice	Panicle initiation/ Dough Grain filling stage	Gundhi bug/ leaf folder/ rice skipper	<ul style="list-style-type: none"> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li> <li>Maintain periphery of nursery field weed free and clean to prevent disease and pest harboring in weeds.</li> <li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li> </ul>
Maize	Fruiting	Grasshopper	<ul style="list-style-type: none"> <li><b>Grasshopper infestation: Bund racking followed by incorporation of Carbofuron 3G</b></li> </ul>
<b>VEGETABLES</b>			
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li> <li><b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with <i>Trichoderma</i> @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li> <li><b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li> <li>Weeding of the standing crop may be done,</li> <li>Monitoring of standing crops against attack of insect pests and diseases.</li> </ul>
Okra	Maturing	Pod borer	<ul style="list-style-type: none"> <li>Harvesting and marketing of tender okra fruits,</li> <li>Collection and destruction of borer damaged pod,</li> </ul>
Ginger/turmeric	Vegetative stage	Rhizome rot	<ul style="list-style-type: none"> <li><b><u>Under excessive moisture, there is every possibility of rhizome rot in ginger and turmeric. To manage the disease, provide adequate drainage and apply <i>Trichoderma harzianum</i> @ 50 g/bed along with FYM/ neem cake.</u></b></li> <li>Provide adequate drainage to prevent water stagnation and apply <i>Trichoderma harzianum</i> @50 g/bed along with FYM/neem cake.</li> <li>Mulching should be done with locally available mulch,</li> <li>Earthing up of exposed rhizome,</li> </ul>
<b>HORTICULTURAL CROPS</b>			
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker</li> <li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li> <li><b><u>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</u></b></li> </ul>
Kiwi	Vegetative		<ul style="list-style-type: none"> <li>Manuring with well decomposed FYM@15kg/plant followed by mulching with paddy straw.</li> </ul>
Large Cardamom	Flowering stage	Chirkey Disease (fungal inection) & Chirke and Foorkey (virus infection)	<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Remove diseased part &amp; keep inflorescence clean.</li> <li>Uproot &amp; burn virus infected plants</li> </ul>
Pineapple	Fruiting/Harvesting		<ul style="list-style-type: none"> <li>Harvesting to be done by keeping an inch of fruit stalk to avoid entry of microorganisms which accelerates rotting.</li> </ul>
Banana	Bunching & planting		<ul style="list-style-type: none"> <li>Desuckering of banana to be done leaving one suckers per plant to maintain the health of mother plant.</li> <li>Remove the male flower in banana bunches to attain better finger/fruit size.</li> <li>Remove excess sucker from Banana in mother plant and give support in banana bunches to protect falling due to heavy weight or storm.</li> </ul>



Orchards			<ul style="list-style-type: none"> <li>• Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>• Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
<b>Honey Bees</b>			
Honey bees			<ul style="list-style-type: none"> <li>• Provide sugar syrup near the box</li> <li>• Add insulation and ventilation systems</li> </ul>
<b>LIVESTOCKS</b>			
<b>Livestock</b>	<b>Stage</b>	<b>Disease</b>	<b>Precautionary Practices to be followed</b>
<b>General</b> <ul style="list-style-type: none"> <li>• <b>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</b></li> <li>• <b>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</b></li> </ul>			
Poultry	All stages		<ul style="list-style-type: none"> <li>• <b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>• Proper ventilation of shed</li> <li>• Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>• Avoid overcrowding.</li> <li>• Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>• Vaccination as per the schedule with proper consultation with vet. <ul style="list-style-type: none"> <li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days: F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul> </li> <li>• Remove wet litter</li> </ul>
Fishery			<ul style="list-style-type: none"> <li>• Application of quick lime is highly recommended in order to rectify water pH.</li> <li>• Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>• Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>• 1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>• Reduce concentrate diet up to 5%</li> <li>• Provide adequate potable water</li> <li>• <b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li>• <u><b>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</b></u></li> <li>• Provide UMB/Molases if possible in the feed</li> <li>• Provide 10-30 ml of vitamin B-Complex in feed</li> <li>• <b>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</b></li> <li>• <b>Separate sick animals</b></li> <li>• The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>• Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>
Mithun		FMD	<ul style="list-style-type: none"> <li>• Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route.</li> <li>• Pregnant animals above 7 months of pregnancy should be avoided.</li> </ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

Issued jointly by ICAR-RC for NEH Region, Arunachal Pradesh Centre, Basar and India Meteorological Department  
Contact: - [IAAS.BASAR@gmail.com](mailto:IAAS.BASAR@gmail.com), Phone Number: - 03795-226247/37, -96 (Fax)

# कृषि मौसम सलाहकार सेवा पत्रिका

## Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा



**GRAMIN KRISHI MAUSAM SEWA**  
(Integrated Agro-Meteorological Advisory Services)



AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: West Kameng**

**No: 78/2017/Fri**

**Dated: 29<sup>th</sup> September, 2017**



Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
Rainfall = Bomdila: 0.0 ; Bhalukpong: 6.4 mm (up to 26 <sup>th</sup> Sept)	Mostly cloudy with possibility of light/moderate rainfall. Daily maximum and minimum temperature for the following period is predicted to be 21-22°C and 13-15°C respectively. Expected morning and evening relative humidity will be 92-96% and 62-75% respectively. Wind direction is mainly E with speed range of 2-5 kmph.
<b>Warning:</b>	•

### Weather Based Agro-meteorological Advisories Bulletin

#### General Recommendations

- Disinfecting the animal/bird sheds with lime powder/ bleaching powder/ 4%NaOH at regular interval is advocated
- Spraying operation should be done only on dry/clear weather
- Go for low cost polyhouses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
FIELD CROPS			
Maize	Fruiting	Grasshopper	<ul style="list-style-type: none"><li>If dry weather prevails, foliar spray 1% urea is recommended</li><li><b>Grasshopper infestation: Bund racking followed by incorporation of Carbofuron 3G</b></li></ul>
Rice	Panicle initiation/ Dough Grain filling stage	Gundhi bug/ leaf folder/ rice skipper	<ul style="list-style-type: none"><li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li><li>Maintain periphery of nursery field weed free and clean to prevent disease and pest harboring in weeds.</li><li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li></ul>
Groundnut	Pegging	Leaf Spot/tikka disease	<ul style="list-style-type: none"><li>On sunny day, spray carbendazim/Mancozeb @ 1-2 ml/lit of water</li><li>Do not disturb the soil structure by spading/hoeing in the field.</li><li>Hand weeding with care is recommended.</li></ul>
VEGETABLES			
Okra	Maturing	Pod borer	<ul style="list-style-type: none"><li>Harvesting and marketing of tender okra fruits,</li><li>Collection and destruction of borer damaged pod,</li></ul>
Rabi vegetables	Nursery		<ul style="list-style-type: none"><li><b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li><li><b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with Trichoderma @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li><li><b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li><li><b>Weeding of the standing crop may be done,</b></li><li><b>Monitoring of standing crops against attack of insect pests and diseases.</b></li></ul>
Ginger/turmeric	Vegetative stage	Rhizome rot	<ul style="list-style-type: none"><li><b><u>Under excessive moisture, there is every possibility of rhizome rot in ginger and turmeric. To manage the disease, provide adequate drainage and apply Trichoderma harzianum @ 50 g/bed along with FYM/ neem cake.</u></b></li><li>Provide adequate drainage to prevent water stagnation and apply Trichoderma harzianum @50 g/bed along with FYM/neem cake.</li><li>Mulching should be done with locally available mulch,</li><li>Earthing up of exposed rhizome,</li></ul>
HORTICULTURAL CROPS			
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"><li>Undertake necessary tillage operation if there is no rain.</li><li>Remove weeds from the tree basin and prepare ring around the tree.</li><li>Due to high humidity the problem of citrus canker get aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker</li><li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li><li><b>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</b></li></ul>
Kiwi	Vegetative		<ul style="list-style-type: none"><li>Manuring with well decomposed FYM@15kg/plant followed by mulching with paddy straw.</li></ul>
Pineapple	Active vegetative / Fruiting		<ul style="list-style-type: none"><li>Mulching with locally available materials like dry grass/paddy straw recommended</li></ul>
Banana	Bunching & planting		<ul style="list-style-type: none"><li>Desuckering of banana to be done leaving one suckers per plant to maintain the health of mother plant.</li><li>Remove the male flower in banana bunches to attain better finger/fruit size.</li><li>Remove excess sucker from Banana in mother plant and</li></ul>

			give support in banana bunches to protect falling due to heavy weight or storm.
Orchards			<ul style="list-style-type: none"> <li>• Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>• Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
Apple	Vegetative	Wooly aphids	<ul style="list-style-type: none"> <li>• Swab the stem with mineral oil against wooly aphid.</li> </ul>
<b>Honey Bees</b>			
Honey bees			<ul style="list-style-type: none"> <li>• Provide sugar syrup near the box</li> <li>• Add insulation and ventilation systems</li> </ul>
<b>LIVESTOCKS</b>			
<b>Livestock</b>	<b>Stage</b>	<b>Disease</b>	<b>Precautionary Practices to be followed</b>
<b>General</b> <ul style="list-style-type: none"> <li>• <b>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</b></li> <li>• <b>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</b></li> </ul>			
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>• Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>• 1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>• Reduce concentrate diet up to 5%</li> <li>• Provide adequate potable water</li> <li>• <b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Fishery			<ul style="list-style-type: none"> <li>• Application of quick lime is highly recommended in order to rectify water pH.</li> <li>• Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li>• <b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>• Proper ventilation of shed</li> <li>• Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>• Avoid overcrowding.</li> <li>• Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>• Vaccination as per the schedule with proper consultation with vet. <ul style="list-style-type: none"> <li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days:</li> <li>F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days:</li> <li>F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul> </li> <li>• Remove wet litter</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li>• <u><b>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</b></u></li> <li>• Provide UMB/Molases if possible in the feed</li> <li>• Provide 10-30 ml of vitamin B-Complex in feed</li> <li>• <b>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</b></li> <li>• <b>Separate sick animals</b></li> <li>• The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>• Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>
Mithun		FMD	<ul style="list-style-type: none"> <li>• Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route.</li> <li>• Pregnant animals above 7 months of pregnancy should be avoided.</li> </ul>
<b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b>			

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**Agrometeorological Field Unit**  
**ICAR, BASAR**

# कृषि मौसम सलाहकार सेवा पत्रिका Agro-met Advisory Bulletin

(Period: 30<sup>th</sup> Sept to 3<sup>rd</sup> Oct 2017)

ग्रामीण कृषि मौसम सेवा



**GRAMIN KRISHI MAUSAM SEWA**  
(Integrated Agro-Meteorological Advisory Services)



AMFU, ICAR Research Complex for NEH Region  
Arunachal Pradesh Centre, Basar-791101

**District: West Siang**

**No: 78/2017/Fri**

**Dated: 29<sup>th</sup> September, 2017**



Basar: Latitude: 27°59.53/Longitude: 94.41.269/Altitude: 616 amsl

Weather summary of the previous week	Weather forecast valid up to 4 <sup>th</sup> Oct 2017
<b>Basar:</b> Rainfall = 0.0 mm. T. Max: 32.8°C, T. Min: 21.0°C, RH: 57-91%, Wind Speed: 3-4 kmph, Wind Direction: WSW & SW	<b>Mostly cloudy with possibility of moderate to rather heavy rainfall.</b> Daily maximum and minimum temperature for the following period is predicted to be 29-30°C and 22-23°C respectively. Expected morning and evening relative humidity will be 91-95% and 68-88% respectively. Wind direction is mainly WSW & WNW with speed range of 2-4 kmph.
<b>Warning:</b>	•

## Weather Based Agro-meteorological Advisories Bulletin

### General Recommendations

- Disinfecting the animal/bird sheds with lime powder/ bleaching powder/ 4%NaOH at regular interval is advocated
- Go for low cost polyhouses for year round cultivation of vegetables
- Obtain seeds from reputed/certified/reliable source
- Use fertilizers/pesticides as per recommended doses for the location
- Preference must be given on use of organic manures/bio-fertilizers & bio-pesticides
- ICAR Basar recommend poultry variety VANARAJA for backyard rearing



It is advised that farmers may use zero tillage technology in harvested paddy fields in upland/Jhum for sowing of Pea/maize. In this method without ploughing, sowing of pea may be done to use moisture of rice field and straw of rice as organic manure. Taking into account the rainfall recorded during last week, this technology is very suitable for harvested *Jhum* rice field.

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
<b>FIELD CROPS</b>			
Groundnut	Pegging	Leaf Spot/tikka disease	<ul style="list-style-type: none"> <li>On sunny day, spray carbendazim/Mancozeb @ 1-2 ml/lit of water</li> <li>Do not disturb the soil structure by spading/hoeing in the field.</li> <li>Hand weeding with care is recommended.</li> </ul>
Rice	Dough Grain filling stage	Gundhi bug	<ul style="list-style-type: none"> <li>Monitor crop against attack of gundhi bug,</li> <li>Weeding is advised to ward off the alternate host of gundhi bug</li> <li>Install local trap of dead frog/fermented fish etc against gundhi bug in rice or spray triazophos/chloripyriphos@1-2ml/lit.</li> <li><b>Need based spray of Flubendiamide 3.5% + Hexaconazole 5% @ 2ml/lit against rice skipper &amp; leaf folder using sticker</b></li> </ul>
Pulses	Flowering	Blister beetle	<ul style="list-style-type: none"> <li>Application of fertilizers and spray operations to be delayed/avoided</li> <li>Go for manual picking of Blister beetle without delay because the incidence of the pest during flowering stage cause huge lose in harvest</li> </ul>
<b>VEGETABLES</b>			
Okra	Maturing	Pod borer	<ul style="list-style-type: none"> <li>Harvesting and marketing of tender okra fruits,</li> <li>Collection and destruction of borer damaged pod,</li> </ul>
Rabi vegetables	Nursery		<ul style="list-style-type: none"> <li><b><u>In present weather conditions, nursery sowing of hybrid tomato, cauliflower and cabbage may be done.</u></b></li> <li><b><u>The seeds should be sown on raised beds (15-20 cm) after treating seeds with <i>Trichoderma</i> @ 10 g/kg or with Captan/Thiram @ 2-3 g/kg seeds.</u></b></li> <li><b><u>After sowing the seeds in the nursery, cover it with mixture of well rotten compost + friable soil + sand (2:1:1) and mulch with paddy straw / dried leaves.</u></b></li> <li>Weeding of the standing crop may be done,</li> <li>Monitoring of standing crops against attack of insect pests and diseases.</li> </ul>
Ginger/turmeric	Vegetative stage	Rhizome rot	<ul style="list-style-type: none"> <li><b><u>Under excessive moisture, there is every possibility of rhizome rot in ginger and turmeric. To manage the disease, provide adequate drainage and apply <i>Trichoderma harzianum</i> @ 50 g/bed along with FYM/ neem cake.</u></b></li> <li>Provide adequate drainage to prevent water stagnation and apply <i>Trichoderma harzianum</i> @50 g/bed along with FYM/neem cake.</li> <li>Mulching should be done with locally available mulch,</li> <li>Earthing up of exposed rhizome,</li> </ul>
Cucurbits (Bottle gourd,Ridge gourd, Pumpkin, Bitter gourd, Cucumber, etc.)	Harvesting	Aphid/ Red pumpkin beetle/ Cutworm	<ul style="list-style-type: none"> <li>On clear/dry weather, Spraying of Dimethoate 30 EC @ 3ml/litre of water is advised against aphids,</li> <li>On clear/dry weather, Spraying of Deltamethrin 4ml/10 litre of water is advised for management of Red pumpkin beetle grass,</li> <li>Drench the base with chlorpyrifos 20EC @ 2ml/litre; 1litre per plant.</li> </ul>
<b>HORTICULTURAL CROPS</b>			
Citrus	Fruit development stage	Citrus Canker Soot Grab	<ul style="list-style-type: none"> <li>Undertake necessary tillage operation if there is no rain.</li> <li>Remove weeds from the tree basin and prepare ring around the tree.</li> <li>Due to high humidity the problem of citrus canker get</li> </ul>

			aggravated in acid lime leading to excessive fruit drop. Spray copper oxychloride 180 gms with spreptocycline 6 gms in 60 liters of water to control canker <ul style="list-style-type: none"> <li>Follow clean cultivation in orchard and bury fallen fruits in a deep pit frequently.</li> <li><b>Incorporate Clothianidin 50 WDG @ 4gm/plant in base region of the plant against soot grab.</b></li> </ul>
Guava	Fruit Development	Fruit fly	<ul style="list-style-type: none"> <li>Basin cleaning and manuring</li> <li>Install fruit fly pheromone traps for collection and destruction of the adult insects</li> </ul>
Banana	Fruiting/Ripening		<ul style="list-style-type: none"> <li>Cover bunches with banana bunch covers or sacks or locally available materials to protect against sunscald, birds and insects.</li> </ul>
Kiwi	Vegetative		<ul style="list-style-type: none"> <li>Manuring with well decomposed FYM@15kg/plant followed by mulching with paddy straw.</li> </ul>
Pineapple	Fruiting/Harvesting		<ul style="list-style-type: none"> <li>The fruit must be harvested with crown (whorl of leaves attached to the apical end of the fruit) to prolong the freshness of fruit and avoid microbial attack.</li> </ul>
Ginger/Turmeric	Seedling		<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Proper drainage to be done and avoid water stagnation</li> </ul>
Large Cardamom	Flowering stage	Chirkey Disease (fungal infection) & Chirke and Foorkey (virus infection)	<ul style="list-style-type: none"> <li>Mulching with locally available materials like dry grass/paddy straw recommended</li> <li>Remove diseased part &amp; keep inflorescence clean.</li> <li>Uproot &amp; burn virus infected plants</li> </ul>
Orchards			<ul style="list-style-type: none"> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
<b>Honey Bees</b>			
Honey bees			<ul style="list-style-type: none"> <li>Box must be covered with straw/dry leaves to provide warmth</li> <li>Provide sugar syrup</li> </ul>
<b>LIVESTOCKS</b>			
<b>Livestock</b>	<b>Stage</b>	<b>Disease</b>	<b>Precautionary Practices to be followed</b>
<b>General</b> <ul style="list-style-type: none"> <li>Damaged grain (not fungus contaminated) to be diverted for Poultry/livestock feeding</li> <li>Clean drinking water should be ensured round the clock and water troughs/feeders should be regularly cleaned,</li> </ul>			
Goat	All stages		<ul style="list-style-type: none"> <li>Deworming for gastrointestinal parasite</li> </ul>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.) Swine Fever	<ul style="list-style-type: none"> <li>Animals to be housed in dry place or kept in alleviated area and dry bedding (straw) to be provided to young animals,</li> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of age followed by annual vaccination under vet supervision against FMD</li> <li>Reduce concentrate diet up to 5%</li> <li>Provide adequate potable water</li> <li><b>In present weather conditions vaccinate against swine fever (Vaccines available in State Veterinary Depts),</b></li> </ul>
Fishery			<ul style="list-style-type: none"> <li>Application of quick lime is highly recommended in order to rectify water pH.</li> <li>Application of fish feed (mustard oil cake) is essential for achieving higher yield</li> </ul>
Poultry	All stages		<ul style="list-style-type: none"> <li><b>Provide preventive dose of anti-coccidial drugs to poultry.</b></li> <li>Proper ventilation of shed</li> <li>Provide glucose/electral along with vitamin supplements (@5-6ml/100 birds) with adequate potable water</li> <li>Avoid overcrowding.</li> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</li> <li>Vaccination as per the schedule with proper consultation with vet.               <ul style="list-style-type: none"> <li>➤ Day old chick: HVT Marek disease vaccine, 4-7 days:</li> </ul> </li> </ul>

			<p>F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</p> <ul style="list-style-type: none"> <li>Remove wet litter</li> </ul>
Cattle	All stages	FMD	<ul style="list-style-type: none"> <li><b><u>In present weather conditions, special care should be taken against attack of maggots in the wounds of animals. Application of turpentine oil in the wounds followed by application of antibiotics for five days is advised.</u></b></li> <li>Provide UMB/Molases if possible in the feed</li> <li>Provide 10-30 ml of vitamin B-Complex in feed</li> <li><b>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1<sup>st</sup> injection followed by annual vaccination under vet supervision</b></li> <li><b>Separate sick animals</b></li> <li>The animal should be washed with lukewarm water added with little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>Long hair near the udder/stomach/back legs should be teamed short.</li> </ul>
Mithun		FMD	<ul style="list-style-type: none"> <li>Polyvalent FMD vaccine with serotype O, A and Asia at 6 months of age and repeat after that 6 months interval by sub-cutaneous route.</li> <li>Pregnant animals above 7 months of pregnancy should be avoided.</li> </ul>
<p><b>Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247</b></p>			

Issued jointly by ICAR-RC for NEH Region, Arunachal Pradesh Centre, Basar and India Meteorological Department  
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