### **Agro-met Advisory Bulletin**

(Period: 12th to 14th April 2017)





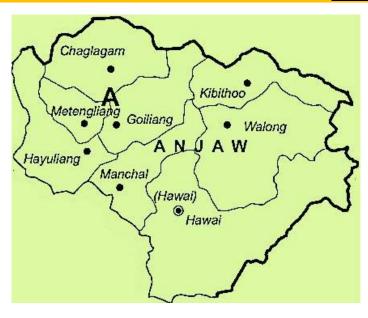


AMFU, ICAR Research Complex for NEH Region Arunachal Pradesh Centre, Basar-791101

**District: Anjaw** 

No: 29/2017/Tue

Dated: 11th April, 2017



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

Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April 2017
No weather summary available	Mostly sunny with no possibility of rainfall. Daily maximum and
	minimum temperature for the following period is predicted to be 26-
	29°C and 17-19°C respectively. Expected morning and evening
	relative humidity will be 66-85% and 29-39% respectively. Wind
	will blow mostly from E at a speed range of 8-9 kmph.
Warning:	• NIL

### Weather Based Agro-meteorological Advisories Bulletin

- 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
Стор	Biage	1 CSU DISCASE	FIELD CROPS
Rice	Nursery/trans	Stem borer	Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in
1400	plantation	Stem oorer	rice nursery as well as in main field.
	prantation		• Cut the tips of the leaves before transplanting reduces the
			population of stem borer as the eggs are laid on that site. It
			will reduce the carryover of the infestation to the main field.
			Careful timing of planting can avoid damage; once the
			tillering stage is over, attack of some insects reduces.
			<ul> <li>Follow clean cultivation, presence of grasses near the rice</li> </ul>
			crop favors build-up of pest population
			<ul> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop</li> </ul>
			for 20 to 30 days
			<ul> <li>Avoid closer spacing while transplantation which creates</li> </ul>
			favorable microclimate for pests in the field. Follow wider spacing of 20X15cm.
Pea	Sowing		Sowing of pea recommended for higher altitudes with raised
			bed of 15-20cm
			<ul> <li>Provide proper drainage to already sown crops</li> </ul>
Maize	Sowing		Sowing of Maize advocated
	C		• Carry out seed dressing/treatment with Thiram or
			Carbendazim @ 2g/kg seed before sowing
			• Follow time isolation of atleast 15 days for two or more
			different varieties of maize in Jhum field
Jhum field	Sowing		Adopt sowing of leguminous crops like cowpea, frenchbean,
onum Held	Sowing		soybean etc at 2-3 rows across the slope of jhum field at
			desirable intervals or ratios with rice to prevent soil erosion
			and conserve moisture and fertility.
			•
			Carbendazim @ 2g/kg seed before sowing.
			Cowpea variety (Kashi Kanchan) and Frenchbean variety
			(Selection-9) are advocated for intercropping as they are short
			duration, dwarf and high yielding.
Colo grans	Nurcory		VEGETABLES  Poising purposers can be comised out in higher altitudes/ cold
Cole crops	Nursery		<ul> <li>Raising nursery can be carried out in higher altitudes/ cold areas</li> </ul>
Tomato	Vegetative/Nur	Nursery insects	<ul> <li>Nursery raising under protected cultivation</li> </ul>
	sery		• Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500
			litres water/ha
			<ul> <li>Right time for transplanting the ready seedlings from nursery</li> </ul>
Pre-summer	Sowing	Nursery insects	• Right time for transplanting the ready seedlings of chili,
vegetables			tomato, capsicum etc.
			<ul> <li>Provide proper drainage to newly transplanted seedlings and</li> </ul>
			follow raised bed for sowing
			• Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500
			litres water/ha against nursery insects
		HORT	TICULTURAL CROPS
Ginger/Turmeric	Sowing		<ul> <li>Disease free ginger/turmeric rhizomes of 30-40g having</li> </ul>
	-		atleast 2 eyes to be sown in finely tilth bed of 1 meter width,
			15 cm high and of convenient length at a spacing of 30 cm
			between rows and 25cm between plants.
Citrus	Flowering	Bark eating	Budding method of propagation (T-budding) to commences in
	0	caterpillar	oranges using Rangpur lime as rootstock.
		_	Cleaning & smearing of trunk base with Bordeaux paste
			• If flowering begins, avoid spray of insecticides/ pesticides as it
			<ul><li>may affect pollination process.</li><li>Spray (Planofix) NAA based growth regulator @2m/5lit water</li></ul>

Large Cardamom	Sowing	Wooly aphids	<ul> <li>during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> <li>On clear/dry day, swab the stem with mineral oil against wooly aphid.</li> </ul>
		A	GROFORESTRY
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings
			LIVESTOCKS
Livestock	Stage	Disease	Precautionary Practices to be followed
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <li>Animals should be given lukewarm feed and water.</li> <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> </ul>
Poultry	All stages		<ul> <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 multivitamins</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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter</li> </ul>
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Cattle	All stages	FMD	<ul> <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	A (ICAD)	FMD	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.
Contact Scienti	sts (ICAK) or St	ate Agril Staff or l	KVK staff for measures against adverse conditions or call at 03795- 226237/226247

## **Agro-met Advisory Bulletin**

(Period: 12th to 14th April 2017)

### ग्रामीण कृषि मौसम सेवा



### GRAMIN KRISHI MAUSAM SEWA

(Integrated Agro-Meteorological Advisory Services)

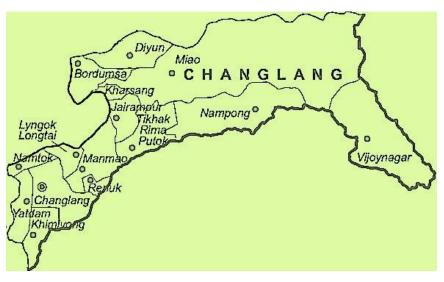


AMFU, ICAR Research Complex for NEH Region Arunachal Pradesh Centre, Basar-791101

**District: Changlang** 

No: 29/2017/Tue

Dated: 11th April, 2017



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

Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April 2017
Rainfall = Changlang: 24.4 mm Miao: 56.0	Mostly sunny weather forecasted with light/moderate rainfall on
mm	12 <sup>th</sup> & 16 <sup>th</sup> April. Daily maximum and minimum temperature for
	the following period is predicted to be 27-30°C and 18-20°C
	respectively. Expected morning and evening relative humidity will
	be 66-83% and 22-47% respectively. Wind direction is SE & SSE
	with speed range of 4-6 kmph.
Warning	• NIL

#### Weather Based Agro-meteorological Advisories Bulletin

- 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
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider spacing of 20X15cm.</li> </ul>
Maize	Sowing		<ul> <li>Sowing of maize in higher altitudes advocated in raised bed</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> </ul>
			VEGETABLES
Pre-summer vegetables	Sowing		<ul> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed of 15-20cm for sowing</li> </ul>
		HORT	ICULTURAL CROPS
Citrus	Flowering	Bark eating caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> </ul>
Ginger/Turmeric	Sowing		Disease free ginger/turmeric rhizomes of 30-40g having atleast 2 eyes to be sown in finely tilth bed of 1 meter width, 15 cm high and of convenient length at a spacing of 30 cm between rows and 25cm between plants.
Large Cardamom	Sowing		<ul> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> </ul>
			Honey Bees
Honey bees			<ul> <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
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <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</li> </ul>
Poultry	All stages		<ul> <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 adequate clean drinking water+electrolyte and multivitamins</li> </ul>

			<ul> <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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> </ul>
			Remove wet litter/provide artificial heating and light
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Cattle	All stages	FMD	• 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

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: - <a href="mailto:IAAS.BASAR@gmail.com">IAAS.BASAR@gmail.com</a>, Phone Number: - 03795-226247/37, -96 (Fax)

## **Agro-met Advisory Bulletin**

(Period: 12th to 14th April 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: Dibang Valley** 

No: 29/2017/Tue

Dated: 11th April, 2017



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

Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April, 2017
Rainfall = 0.0 mm (Anini)	Mostly sunny weather with possibility of light rainfall in few
	<b>places.</b> Daily maximum and minimum temperature for the following
	period is predicted to be 14-15°C and 8-10°C respectively. Expected
	morning and evening relative humidity will be 68-82% and 28-54%
	respectively. Wind direction is E with speed range of 7-8 kmph.
Warning:	• NIL

#### Weather Based Agro-meteorological Advisories Bulletin

- Disinfecting the animal/bird sheds with lime powder/ bleaching powder/ 4%NaOH at regular interval is
- 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
	~ :		FIELD CROPS
Maize	Sowing		<ul> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field</li> </ul>
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider spacing of 20X15cm.</li> </ul>
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> </ul>
		'	VEGETABLES
Cole crops	Nursery		<ul> <li>Raising nursery can be carried out in higher altitudes/ cold areas</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> </ul>
Pre-summer vegetables	Sowing		<ul> <li>Avoid sowing of pre-summer vegetables like okra, frenchbean etc as the germination percentage will be very low</li> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing</li> </ul>
		HOR	TICULTURAL CROPS
Ginger/Turmeric  Citrus	Sowing	Bark eating caterpillar	<ul> <li>Disease free ginger/turmeric rhizomes of 30-40g having atleast 2 eyes to be sown in finely tilth bed of 1 meter width, 15 cm high and of convenient length at a spacing of 30 cm between rows and 25cm between plants.</li> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water</li> </ul>
			<ul> <li>during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> </ul>

Large Cardamom	Sowing		<ul> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> </ul>
Apple	Vegetative	Wooly aphids	Swab the stem with mineral oil against wooly aphid.
		_	Agroforestry
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings
			Honey Bees
Honey bees			In case of rain provide sugar syrup
			LIVESTOCKS
Livestock	Stage	Disease	Precautionary Practices to be followed
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <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</li> </ul>
Poultry	All stages		<ul> <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 adequate clean drinking water+electrolyte and multivitamins</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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Cattle	All stages	FMD	• 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
Mithun		FMD	<ul> <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>
Contact Scienti	ists (ICAR) or St	ate Agril Staff or 1	KVK staff for measures against adverse conditions or call at 03795- 226237/226247

## **Agro-met Advisory Bulletin**

( Period: 12<sup>th</sup> to 14<sup>th</sup> April 2017)

ग्रामीण कृषि मौसम सेवा



### GRAMIN KRISHI MAUSAM SEWA

(Integrated Agro-Meteorological Advisory Services)

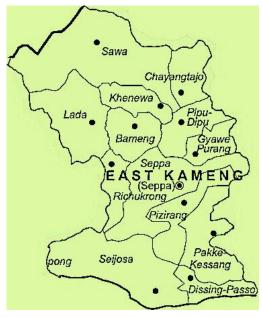


AMFU, ICAR Research Complex for NEH Region Arunachal Pradesh Centre, Basar-791101

### **District: East Kameng**

No: 29/2017/Tue

Dated: 11th April, 2017



Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April 2017
Rainfall = 43.9 mm	Mostly sunny with possibility of light rainfall on 14 <sup>th</sup> & 16 <sup>th</sup>
	<b>April in few places.</b> Daily maximum and minimum temperature for
	the following period is predicted to be 23-25°C and 13-16°C
	respectively. Expected morning and evening relative humidity will
	be 54-82% and 28-43% respectively. Expected wind direction is
	ESE & SE with speed range of 4-8 kmph.
Warning:	• NIL

### Weather Based Agro-meteorological Advisories Bulletin

- 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
•			FIELD CROPS
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider spacing of 20X15cm.</li> </ul>
Maize	Sowing		<ul> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field</li> </ul>
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> </ul>
Pea	Sowing		<ul> <li>Sowing of pea can be done in higher altitudes</li> <li>Sowing should be done in raised bed of 15-20cm</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> </ul>
			VEGETABLES
Cole crops	Nursery		Raising nursery can be carried out in higher altitudes/ cold areas
Tomato	Vegetative/Nur sery	Nursery insects	<ul> <li>Cover the crop with polyethene/cloths to protect from frost/rain</li> <li>Nursery raising under protected cultivation</li> <li>Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha against nursery insects</li> </ul>
Pre-summer vegetables	Sowing	нова	<ul> <li>Sowing of pre-summer vegetables like okra, frenchbean can be done</li> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide drainage to newly transplanted seedlings</li> </ul>
Ginger/Turmeric	Sowing	HOKT	TCULTURAL CROPS  Disease free ginger/turmeric rhizomes of 30 40g having
			Disease free ginger/turmeric rhizomes of 30-40g having atleast 2 eyes to be sown in finely tilth bed of 1 meter width, 15 cm high and of convenient length at a spacing of 30 cm between rows and 25cm between plants.
Citrus	Flowering	Bark eating caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it</li> </ul>

Contact Scien	tists (ICAR) or		f or KVK staff for measures against adverse conditions or call 3795-226237/226247
Mithun		FMD	<ul> <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>
Cattle	All stages	FMD	• 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
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Pigs  Poultry	All stages All stages	Disease FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <li>Precautionary Practices to be followed</li> <li>Animals should be given lukewarm feed and water.</li> <li>Keep the houses dry and clean.</li> <li>1st injection at 6 months of age and 2nd injection at 12 months of age followed by annual vaccination under vet supervision</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 adequate clean drinking water+electrolyte and multivitamins</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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
T	G4	D:	LIVESTOCKS
Toko palm	Nursery		
Toko polm	Nurgary		Agroforestry Filling of nursery polybags for raising of takopalm seedlings
Large Cardamom	Sowing		<ul> <li>about 2cm, below the dead portion.</li> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> </ul>
			<ul> <li>may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned,</li> </ul>

 $Is sued jointly \ by \ ICAR-RC \ for \ NEH \ Region, Arunachal \ Pradesh \ Centre, \ Basar \ and \ India \ Meteorological \ Department \ Contact: - \underline{IAAS.BASAR@gmail.com}, \ Phone \ Number: -03795-226247/37, -96 \ (Fax)$ 

### **Agro-met Advisory Bulletin**

(Period: 12<sup>th</sup> to 14<sup>th</sup> April 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: 29/2017/Tue

Dated: 11th April, 2017



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

Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April 2017
Rainfall: 42.8 mm	<b>Mostly sunny with possibility of light rainfall on 12<sup>th</sup> April.</b> Daily
	maximum and minimum temperature for the following period is
	predicted to be 26-28°C and 18-19°C respectively. Expected
	morning and evening relative humidity will be 59-74% and 24-42%
	respectively. Expected wind direction is West with speed range of 5-
	6 kmph.
Warning:	• NIL

### Weather Based Agro-meteorological Advisories Bulletin

- 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				
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider spacing of 20X15cm.</li> </ul>	
Pea	Sowing		<ul> <li>Sowing of pea recommended for higher altitudes with raised bed of 15-20cm</li> <li>Provide proper drainage to already sown crops</li> </ul>	
Maize	Sowing		<ul> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field</li> </ul>	
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing to avoid fungal infections during rainy days</li> </ul>	
	1	T	VEGETABLES	
Cole crops	Nursery		Raising nursery can be carried out in higher altitudes/ cold	
Tomato	Vegetative/Nur sery	Nursery insects	<ul> <li>Cover the crop with polyethene/cloths to protect from frost/rain</li> <li>Nursery raising under protected cultivation</li> <li>Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha</li> </ul>	
Pre-summer vegetables	Sowing	Nursery insects	<ul> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing</li> <li>Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha against nursery insects</li> </ul>	
Citrus	Flowering	Bark eating	Budding method of propagation (T-budding) to commences in	
		caterpillar	<ul> <li>oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and</li> </ul>	

Ginger/Turmeric  Large Cardamom	collection/ Land preparation		<ul> <li>inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> <li>Identify healthy plants for seed rhizomes/ collect better seedlings from ICAR Basar or KVK West Siang/Anjaw</li> <li>Keep selected rhizomes for planting material in partial shade for better sprouting.</li> <li>Mulching materials like forest litters or crop residues should be collected in advance</li> <li>Land preparation to a fine tilth to be done before sowing during sunny days</li> <li>Avoid sowing of Ginger/Turmeric during rainy days</li> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> </ul>
			Honey Bees
Honey bees			On prolong rain, provide sugar syrup
			LIVESTOCKS
Livestock	Stage	Disease	Precautionary Practices to be followed
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	• 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
Poultry	All stages		<ul> <li>Follow 'All in All out' system of rearing and do not rear birds of different age groups together.</li> <li>Provide adequate clean drinking water+electrolyte and multivitamins</li> <li>Give broad-spectrum antihelmintic drugs as per prescribed 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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Cattle	All stages	FMD	• 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
Mithun		FMD	<ul> <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>
Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247			

### **Agro-met Advisory Bulletin**

(Period: 12<sup>th</sup> to 14<sup>th</sup> April 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: 29/2017/Tue

Dated: 11th April, 2017



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

Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April 2016
Past weather summary not available	Partly cloudy sky with possibility of very light rainfall. Daily
	maximum and minimum temperature for the following period is
	predicted to be 26-28°C and 17-19°C respectively. Expected
	morning and evening relative humidity will be 60-79% and 35-48%
	respectively. Wind direction is WNW & NW with speed range of 2-
	10 kmph.
Warning	• NIL

#### Weather Based Agro-meteorological Advisories Bulletin

- 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		
	FIELD CROPS				
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider</li> </ul>		
Maize	Sowing		<ul> <li>spacing of 20X15cm.</li> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more</li> </ul>		
			different varieties of maize in Jhum field		
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> </ul>		
Pea	Sowing		Sowing of pea recommended for higher altitudes with raised		
	C		bed of 15-20cm		
			Provide proper drainage to already sown crops		
_	~ .		VEGETABLES		
Pre-summer vegetables	Sowing	Nursery insects	<ul> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing</li> <li>Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha against nursery insects</li> </ul>		
		HORT	TICULTURAL CROPS		
Citrus	Flowering	Bark eating caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> </ul>		
Ginger/Turmeric	Sowing		Disease free ginger/turmeric rhizomes of 30-40g having atleast 2 eyes to be sown in finely tilth bed of 1 meter width, 15 cm high and of convenient length at a spacing of 30 cm between rows and 25cm between plants.		
Large Cardamom	Sowing		• Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching & regular light irrigation.		

			• The duration of primary nursery being 3-4 months.
pple	Vegetative	Wooly aphids	Swab the stem with mineral oil against wooly aphid.
			Agroforestry
oko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings
			Honey Bees
			Box must be covered with straw/dry leaves to provide warmth
	T		LIVESTOCKS
Livestock	Stage	Disease	Precautionary Practices to be followed
Cattle	All stages	FMD	<ul> <li>1<sup>st</sup> injection at 6-8 weeks of age, 2<sup>nd</sup> injection after 6 months of 1 injection followed by annual vaccination under vet supervision</li> <li>Separate sick animals</li> <li>The animal should be washed with lukewarm water added wit little potash (KMnO<sub>4</sub>) or neem leaves</li> <li>Long hair near the udder/stomach/back legs should be teamer short.</li> </ul>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <li>newly born piglets.</li> <li>Animals should be given lukewarm feed and water.</li> <li>All animals should be tethered in a covered shelter. Keep the</li> </ul>
Poultry	All stages		<ul> <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 adequate clean drinking water+electrolyte and multivitamins</li> <li>Vaccination as per the schedule with proper consultation with vet</li> <li>Day old chick: HVT Marek disease vaccine, 4-7 day</li> <li>F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 day</li> <li>F/Lasota, 6-7 weeks: Chicken embryo adopted fowl povaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Mithun		FMD	<ul> <li>Polyvalent FMD vaccine with serotype O, A and Asia at 6 month of age and repeat after that 6 months interval by sub-cutaneou route.</li> <li>Pregnant animals above 7 months of pregnancy should be avoided</li> </ul>

 $Is sued jointly \ by \ ICAR-RC \ for \ NEH \ Region, Arunachal \ Pradesh \ Centre, \ Basar \ and \ India \ Meteorological \ Department \ Contact: - \underline{IAAS.BASAR@gmail.com}, \ Phone \ Number: -03795-226247/37, -96 \ (Fax)$ 

## **Agro-met Advisory Bulletin**

( Period: 12<sup>th</sup> to 14<sup>th</sup> April 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: 29/2017/Tue

Dated: 11th April, 2017



Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April, 2017
Rainfall =65.2 mm (Tezu)	Mostly sunny weather with possibility of light/moderate rainfall
	on 12 <sup>th</sup> & 16 <sup>th</sup> April in few places. Daily maximum and minimum
	temperature for the following period is predicted to be 27-29°C and
	17-19°C respectively. Expected morning and evening relative
	humidity will be 64-84% and 22-42% respectively. Wind direction is
	E & SE with speed range of 6-7 kmph.
Warning:	• NIL

### Weather Based Agro-meteorological Advisories Bulletin

- 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

Rice N	Nursery/trans plantation	Stem borer	Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.
Rice	•	Stem borer	rice nursery as well as in main field.
			<ul> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider</li> </ul>
			-
Maize	Sowing		<ul> <li>spacing of 20X15cm.</li> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field</li> </ul>
			VEGETABLES
Cole crops	Nursery		<ul> <li>Raising nursery can be carried out in higher altitudes/ cold areas</li> </ul>
Tomato V	Vegetative/Nur sery		<ul> <li>Cover the crop with polyethene/cloths to protect from frost/rain</li> <li>Nursery raising under protected cultivation</li> </ul>
Pre-summer vegetables	Sowing		<ul> <li>Sowing of pre-summer vegetables like okra, frenchbean etc advocated, avoid sowing during rainy days</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing.</li> </ul>
		<b>П</b> ОРТ	
Citrus  Ginger/Turmeric	Flowering	HORT Bark eating caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> <li>Identify healthy plants for seed rhizomes/ collect better seedlings from ICAR Basar or KVK West Siang/Anjaw</li> <li>Keep selected rhizomes for planting material in partial shade for better sprouting.</li> <li>Mulching materials like forest litters or crop residues should be collected in advance</li> <li>Land preparation to a fine tilth to be done before sowing during sunny days</li> <li>Disease free ginger/turmeric rhizome of 30-40 g having atleast 2 eyes to be sown in finely tilth bed of 1m width, 15 cm high</li> </ul>

			and 25 cm between plants.
Large Cardamom	Sowing		<ul> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> </ul>
			Honey Bees
Honey bees			<ul><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
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <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</li> </ul>
Poultry	All stages		<ul> <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 adequate clean drinking water+electrolyte and multivitamins</li> <li>Give broad-spectrum antihelmintic drugs as per prescribed 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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Cattle	All stages	FMD	<ul> <li>1st injection at 6-8 weeks of age, 2nd injection after 6 months of 1st 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			

## **Agro-met Advisory Bulletin**

( Period: 12<sup>th</sup> to 14<sup>th</sup> April 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: 29/2017/Tue

Dated: 11th April, 2017



Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April, 2017
Rainfall = 92.3 mm (Roing)	Mostly sunny weather forecasted with possibility of light rainfall
	on 12 <sup>th</sup> April. Daily maximum and minimum temperature for the
	following period is predicted to be 25-26°C and 17-19°C
	respectively. Expected morning and evening relative humidity will be
	56-75% and 22-38% respectively. Wind direction is East with speed
	range of 6-8 kmph.
Warning:	• NIL

### 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

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
*		<u>'</u>	FIELD CROPS
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> </ul>
Maize	Sowing		<ul> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider spacing of 20X15cm.</li> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more</li> </ul>
Pea	Sowing		<ul> <li>different varieties of maize in Jhum field</li> <li>Sowing of pea recommended for higher altitudes with raised bed of 15-20cm</li> <li>Provide proper drainage to already sown crops</li> </ul>
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing to avoid fungal</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> </ul>
	<u>'</u>	l .	VEGETABLES
Cole crops Pre-summer	Nursery Sowing	Nursery insects	<ul> <li>Raising nursery can be carried out in higher altitudes/ cold areas</li> <li>Sowing of pre-summer vegetables like okra, frenchbean etc</li> </ul>
vegetables			<ul> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing</li> <li>Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha</li> </ul>
		HORT	ICULTURAL CROPS
Citrus	Flowering	Bark eating caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> </ul>

			• Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.
Ginger/Turmeric	Sowing		<ul> <li>Identify healthy plants for seed rhizomes/ collect better seedlings from ICAR Basar or KVK West Siang/Anjaw</li> <li>Keep selected rhizomes for planting material in partial shade for better sprouting.</li> <li>Mulching materials like forest litters or crop residues should be collected in advance</li> <li>Land preparation to a fine tilth to be done before sowing during sunny days</li> <li>Disease free ginger/turmeric rhizome of 30-40 g having atleast 2 eyes to be sown in finely tilth bed of 1m width, 15 cm high and of convenient length at a spacing of 30cm between rows and 25 cm between plants.</li> </ul>
Large Cardamom	Sowing		<ul> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> </ul>
			Agroforestry
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings
			Honey Bees
Honey bees			Box must be covered with straw/dry leaves to provide warmth
			LIVESTOCKS
Livestock	Stage	Disease	Precautionary Practices to be followed
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <li>Animals should be given lukewarm feed and water.</li> <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</li> </ul>
Poultry	All stages		<ul> <li>Give broad-spectrum antihelmintic drugs as per prescribed doses.</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 adequate clean drinking water+electrolyte and multivitamins</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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
Cattle	All stages	FMD	<ul> <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			Best time to prepare the culture pond like cleaning aquatic weeds
•	tists (ICAR) or	State Agril Staff	or KVK staff for measures against adverse conditions or call

at 03795-226237/226247

### **Agro-met Advisory Bulletin**

(Period: 12<sup>th</sup> to 14<sup>th</sup> April 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: 29/2017/Tue

Dated: 11th April, 2017



Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April 2017
Rainfall = 0.0 mm (Ziro)	Variable weather with possibility of light rainfall on 14 <sup>th</sup> & 16 <sup>th</sup>
	<b>April.</b> Daily maximum and minimum temperature for the following
	period is predicted to be 24-26°C and 17-18°C respectively.
	Expected morning and evening relative humidity will be 63-88%
	and 34-51% respectively. Wind direction is WSW with speed range
	of 2-9 kmph.
Warning:	• NIL

### 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

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
			FIELD CROPS
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> </ul>
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider</li> </ul>
Pea	Sowing		<ul> <li>spacing of 20X15cm.</li> <li>Sowing of pea recommended for higher altitudes with raised bed of 15-20cm</li> </ul>
Maize	Sowing		<ul> <li>Provide proper drainage to already sown crops</li> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field</li> </ul>
			VEGETABLES
Tomato	Vegetative/Nur sery	Nursery insects	<ul> <li>Cover the crop with polyethene/cloths to protect from frost/rain</li> <li>Nursery raising under protected cultivation</li> <li>Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha</li> </ul>
Pre-summer vegetables	Sowing	Nursery insects	<ul> <li>Sowing of pre-summer vegetables like okra, frenchbean etc advocated</li> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing</li> <li>Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha</li> </ul>
Cole crops	Nursery	иова	Raising nursery can be carried out in higher altitudes/ cold areas  **COLUMN TO USE OF CROSS   Column To USE OF CROS
Citrus	Flowering	HORT Bark eating caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> </ul>

			<ul> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> </ul>
Ginger/Turmeric  Banana	Sowing	Cold	<ul> <li>Identify healthy plants for seed rhizomes/ collect better seedlings from ICAR Basar or KVK West Siang/Anjaw</li> <li>Keep selected rhizomes for planting material in partial shade for better sprouting.</li> <li>Mulching materials like forest litters or crop residues should be collected in advance</li> <li>Land preparation to a fine tilth to be done before sowing during sunny days</li> <li>Disease free ginger/turmeric rhizome of 30-40 g having atleast 2 eyes to be sown in finely tilth bed of 1m width, 15 cm high and of convenient length at a spacing of 30cm between rows and 25 cm between plants.</li> <li>Timely/regular removal of extra suckers, dry leaves &amp; pseudo-</li> </ul>
Large Cardamom	Sowing		<ul> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> </ul>
Kiwi	Planting		<ul> <li>The duration of primary nursery being 3-4 months.</li> <li>Pit size: 60cmX60cmX60cm</li> <li>Spacing: 6mX4m (Plant to plant and row to row)</li> <li>In kiwi the male and female plants are borne on different vines. So a male plant is provided for pollination of 6-8 plants at every third plant from the second row.</li> <li>Pit filling: mixture of top soil, 20-30kg FYM along with chloropyriphos@25-30g/pit (to avoid insect damage)</li> </ul>
Apple	Vegetative	Wooly aphids	Swab the stem with mineral oil against wooly aphid.
Toko palm	Nursery		Agroforestry Filling of nursery polybags for raising of takopalm seedlings
1	,		Honey Bees
Honey bees			Box must be covered with straw/dry leaves to provide warmth
			LIVESTOCKS
Livestock	Stage	Disease	Precautionary Practices to be followed
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <li>Animals should be given lukewarm feed and water.</li> <li>Keep the houses dry and clean.</li> <li>1st injection at 6 months of age and 2nd injection at 12 months of age followed by annual vaccination under vet supervision</li> </ul>
Poultry	All stages		<ul> <li>Give broad-spectrum antihelmintic drugs as per prescribed doses.</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 adequate clean drinking water+electrolyte and multivitamins</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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Cattle	All stages	FMD	<ul> <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	•	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.
Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call				
at 03795-226237/226247				

## **Agro-met Advisory Bulletin**

( Period: 12<sup>th</sup> to 14<sup>th</sup> April 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: 29/2017/Tue

Dated: 11th April, 2017



Weather summery of the previous week	Weather forecast valid up to 12 <sup>th</sup> April 2017
Rainfall: 3.1 mm; T. Max: 33.0°C; T. Min: 19.0°C; RH: 59-87%	Mostly sunny weather with possibility of no rainfall. Daily maximum and minimum temperature for the following period is predicted to be 30-32°C and 18-19°C respectively. Expected morning and evening relative humidity will be 67-87% and 29-43% respectively. Expected wind direction is ESE with speed range of 3-5 kmph.
Warning:	• NIL

### 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

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider spacing of 20X15cm.</li> </ul>
Maize	Sowing		<ul> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field</li> </ul>
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> </ul>
			VEGETABLES
Cole crops Tomato	Nursery Vegetative/Nur		<ul> <li>Raising nursery can be carried out in higher altitudes/ cold areas</li> <li>Cover the crop with polyethene/cloths to protect from</li> </ul>
D	sery		frost/rain  Nursery raising under protected cultivation
Pre-summer vegetables	Sowing		<ul> <li>Sowing of pre-summer vegetables like French bean, capsicum etc advocated, avoid during rainy days.</li> <li>Seed treatment with Imidichloropid @ 1-2g/10kg is recommended before sowing</li> </ul>
		HORT	TICULTURAL CROPS
Citrus	Flowering	Bark eating caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> </ul>
Ginger/Turmeric	Sowing		<ul> <li>Identify healthy plants for seed rhizomes/ collect better seedlings from ICAR Basar or KVK West Siang/Anjaw</li> <li>Keep selected rhizomes for planting material in partial shade for better sprouting.</li> <li>Mulching materials like forest litters or crop residues should be collected in advance</li> </ul>

Large Cardamom Banana	Sowing	Cold	<ul> <li>Land preparation to a fine tilth to be done before sowing during sunny days</li> <li>Disease free ginger/turmeric rhizome of 30-40 g having atleast 2 eyes to be sown in finely tilth bed of 1m width, 15 cm high and of convenient length at a spacing of 30cm between rows and 25 cm between plants.</li> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> <li>Timely/regular removal of extra suckers, dry leaves &amp; pseudosteam</li> </ul>
			Agroforestry
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings
			Honey Bees
Honey bees			Box must be covered with straw/dry leaves to provide warmth
T 1	G.	D:	LIVESTOCKS
Livestock	Stage	Disease	Precautionary Practices to be followed
Cattle Pigs	All stages All stages	FMD FMD (high fever	<ul> <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> <li>1<sup>st</sup> injection at 6 months of age and 2<sup>nd</sup> injection at 12 months of</li> </ul>
Ç	Ç	and appearance of mucous membrane of the mouth and foot.)	age followed by annual vaccination under vet supervision
Poultry	All stages		<ul> <li>Give broad-spectrum antihelmintic drugs as per prescribed doses.</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 adequate clean drinking water+electrolyte and multivitamins</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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Mithun		FMD	<ul> <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> <li>For KVK staff for measures against adverse conditions or call</li> </ul>

at 03795-226237/226247

### **Agro-met Advisory Bulletin**

(Period: 12<sup>th</sup> to 14<sup>th</sup> April 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: 29/2017/Tue

Dated: 11th April, 2017



Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April 2017
Rainfall = 6.0 mm	Partly cloudy weather with possibility of light rainfall in few
	places. Daily maximum and minimum temperature for the following
	period is predicted to be 15-17°C and 2-3°C respectively. Expected
	morning and evening relative humidity will be 60-80% and 29-38%
	respectively. Wind direction is variable (NE & ENE) with probable
	speed range of 6-9 kmph.
Warning:	• NIL

### Weather Based Agro-meteorological Advisories Bulletin

- 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
			FIELD CROPS
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider spacing of 20X15cm.</li> </ul>
Maize	Sowing		<ul> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field</li> </ul>
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> </ul>
			VEGETABLES
Pre-summer vegetables	Nursery Sowing	Nursery insects	<ul> <li>Raising nursery can be carried out in higher altitudes/ cold areas</li> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing</li> <li>Spray A radirachtin 1% (10000 PPM) @ 1000 1500 ml in 500</li> </ul>
			• Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500
			litres water/ha against nursery insects  CICULTURAL CROPS
Citrus	Flowering	Bark eating caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> </ul>
Large Cardamom Apple	Sowing Vegetative	Wooly aphids	<ul> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> <li>Swab the stem with mineral oil against wooly aphid.</li> </ul>
търно	v egetative	11 Oory apinus	
Tolso males	Numacon		Agroforestry  Eilling of purgons polyhogs for missing of takanalm soudlings
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings

	Honey Bees			
Honey bees			Provide sugar syrup near the box	
			Add insulation and ventilation systems	
			LIVESTOCKS	
Livestock	Stage	Disease	Precautionary Practices to be followed	
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <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</li> </ul>	
Poultry	All stages		<ul> <li>Give broad-spectrum antihelmintic drugs as per prescribed doses.</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 adequate clean drinking water+electrolyte and multivitamins</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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>	
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds.	
Cattle	All stages	FMD	<ul> <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> <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>	
Contact Scient	Contact Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247			

 $Is sued jointly \ by \ ICAR-RC \ for \ NEH \ Region, Arunachal \ Pradesh \ Centre, \ Basar \ and \ India \ Meteorological \ Department \ Contact: -\underbrace{IAAS.BASAR@gmail.com}, \ Phone \ Number: -03795-226247/37, -96 \ (Fax)$ 

## **Agro-met Advisory Bulletin**

(Period: 8th to 11th April 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: 29/2017/Tue

Dated: 11th April, 2017



Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April, 2017
Rainfall = 69.2 mm (Deomali)	Mainly clear/dry weather forecasted with possibility of light
	rainfall on 16 <sup>th</sup> April in few places. Daily maximum and minimum
	temperature for the following period is predicted to be 28-31°C and
	17-19°C respectively. Expected morning and evening relative
	humidity will be 69-87% and 28-49% respectively. Wind direction
	is variable with speed range of 2-4kmph.
Warning:	• NIL

### 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

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
			FIELD CROPS
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider</li> </ul>
			-
Maize	Sowing		<ul> <li>spacing of 20X15cm.</li> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field</li> </ul>
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> </ul>
			VEGETABLES
Pre-summer vegetables	Sowing	Nursery insects	<ul> <li>Sowing of pre-summer vegetables like okra, frenchbean etc advocated, avoid during rainy days</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing</li> <li>Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha against nursery insects</li> </ul>
Citrus	Flowering	Bark eating	Budding method of propagation (T-budding) to commences in
	Tioweiling	caterpillar	<ul> <li>Budding flicthout of propagation (1-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> </ul>
Ginger/Turmeric	Sowing		<ul> <li>Identify healthy plants for seed rhizomes/ collect better seedlings from ICAR Basar or KVK West Siang/Anjaw</li> <li>Keep selected rhizomes for planting material in partial shade for better sprouting.</li> <li>Mulching materials like forest litters or crop residues should</li> </ul>
	1	I	1

Large Cardamom  Toko palm	Sowing		<ul> <li>be collected in advance</li> <li>Land preparation to a fine tilth to be done before sowing during sunny days</li> <li>Disease free ginger/turmeric rhizome of 30-40 g having atleast 2 eyes to be sown in finely tilth bed of 1m width, 15 cm high and of convenient length at a spacing of 30cm between rows and 25 cm between plants.</li> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> <li>Agroforestry</li> <li>Filling of nursery polybags for raising of takopalm seedlings</li> <li>Honey Bees</li> </ul>
			Box must be covered with straw/dry leaves to provide
			warmth
			LIVESTOCKS
Livestock	Stage	Disease	Precautionary Practices to be followed
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	-
Poultry	All stages		<ul> <li>Give broad-spectrum antihelmintic drugs as per prescribed doses.</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 adequate clean drinking water+electrolyte and multivitamins</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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Cattle	All stages	FMD	<ul> <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> <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>
Contact Scien	tists (ICAR) or		or KVK staff for measures against adverse conditions or call 3795-226237/226247

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

Agrometeorological Field Unit ICAR, BASAR

### **Agro-met Advisory Bulletin**

(Period: 12<sup>th</sup> to 14<sup>th</sup> April 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: 29/2017/Tue

Dated: 11th April, 2017



Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April, 2017
Rainfall = 34.0 mm (Tuting)	Partly cloudy sky with possibility of light/moderate rainfall.
	Daily maximum and minimum temperature for the following period
	is predicted to be 24-26°C and 16-18°C respectively. Expected
	morning and evening relative humidity will be 50-75% and 25-48%
	respectively. Wind direction is SE & SSE with speed range of 6-9
	kmph.
Warning:	• NIL

### 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	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider</li> </ul>
Pea	Sowing		<ul> <li>spacing of 20X15cm.</li> <li>Sowing of pea recommended for higher altitudes with raised bed of 15-20cm</li> </ul>
			Provide proper drainage to already sown crops
Maize	Sowing		<ul> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field</li> </ul>
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> </ul>
_			VEGETABLES
Pre-summer vegetables	Sowing	Nursery insects	<ul> <li>Sowing of pre-summer vegetables like okra, frenchbean etc advocated, avoid during rainy days.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing</li> <li>Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha</li> </ul>
C'	TI '		
Citrus	Flowering	Bark eating caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> </ul>
Ginger/Turmeric	Sowing		Identify healthy plants for seed rhizomes/ collect better seedlings from ICAR Basar or KVK West Siang/Anjaw

Large Cardamom	Sowing		<ul> <li>Keep selected rhizomes for planting material in partial shade for better sprouting.</li> <li>Mulching materials like forest litters or crop residues should be collected in advance</li> <li>Land preparation to a fine tilth to be done before sowing during sunny days</li> <li>Disease free ginger/turmeric rhizome of 30-40 g having atleast 2 eyes to be sown in finely tilth bed of 1m width, 15 cm high and of convenient length at a spacing of 30cm between rows and 25 cm between plants.</li> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> </ul> Agroforestry
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings
Honey bees			Honey Bees  Pow must be account with strong/dry leaves to mayide
Tioney bees			<ul> <li>Box must be covered with straw/dry leaves to provide warmth</li> </ul>
			Provide sugar syrup
			LIVESTOCKS
Livestock	Stage	Disease	Precautionary Practices to be followed
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <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</li> </ul>
Poultry	All stages		<ul> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</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 adequate clean drinking water+electrolyte and multivitamins</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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Cattle	All stages	FMD	<ul> <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  Contact Scien	tists (ICAR) or	FMD  State Agril Staff	<ul> <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> <li>For KVK staff for measures against adverse conditions or call</li> </ul>
			3795-226237/226247

 $Is sued jointly \ by \ ICAR-RC \ for \ NEH \ Region, Arunachal \ Pradesh \ Centre, \ Basar \ and \ India \ Meteorological \ Department \ Contact: - \underline{IAAS.BASAR@gmail.com}, \ Phone \ Number: -03795-226247/37, -96 \ (Fax)$ 

Agrometeorological Field Unit ICAR. BASAR

### **Agro-met Advisory Bulletin**

( Period: 12<sup>th</sup> to 14<sup>th</sup> April 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: 29/2017/Tue

Dated: 11th April, 2017



Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April 2017
Rainfall = NA (Puchi Geko); Daporijo: 2.2	Mostly cloudy with possibility of light rainfall in some places.
mm	Daily maximum and minimum temperature for the following period
	is predicted to be 25-28°C and 16-17°C respectively. Expected
	morning and evening relative humidity will be 77-88% and 41-60%
	respectively. Expected wind direction is WNW & NW with speed
	range of 2-7 kmph.
Warning	• NIL

#### 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
		1	FIELD CROPS
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider</li> </ul>
Maize	Sowing		<ul><li>spacing of 20X15cm.</li><li>Sowing of Maize advocated</li></ul>
Waize	Sowing		<ul> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field</li> </ul>
Pea	Sowing		Sowing of pea recommended for higher altitudes with raised bed of 15-20cm
77 (7.11			Provide proper drainage to already sown crops
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> </ul>
			VEGETABLES
Cole crops	Nursery		Raising nursery can be carried out in higher altitudes/ cold areas
Pre-summer vegetables	Sowing	Nursery insects	<ul> <li>Sowing of pre-summer vegetables like okra, frenchbean etc advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing</li> <li>Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha</li> </ul>
Citrus	Flowering	Bark eating	
Ciuus	Flowering	caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> </ul>

Cinger/Turmeric  Large Cardamom  Banana	Bunching	Cold	<ul> <li>Identify healthy plants for seed rhizomes/ collect better seedlings from ICAR Basar or KVK West Siang/Anjaw</li> <li>Keep selected rhizomes for planting material in partial shade for better sprouting.</li> <li>Mulching materials like forest litters or crop residues should be collected in advance</li> <li>Land preparation to a fine tilth to be done before sowing during sunny days</li> <li>Disease free ginger/turmeric rhizome of 30-40 g having atleast 2 eyes to be sown in finely tilth bed of 1m width, 15 cm high and of convenient length at a spacing of 30cm between rows and 25 cm between plants.</li> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> <li>Timely/regular removal of extra suckers, dry leaves &amp; pseudosteam</li> </ul>
Apple	Vegetative	Wooly aphids	Swab the stem with mineral oil against wooly aphid.
T. 1	l x t	1	Agroforestry
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings
Honey bees			Honey Bees
Honey bees			<ul><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
Cattle	All stages	FMD	<ul> <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>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	newly born piglets.  • Animals should be given lukewarm feed and water.  • All animals should be tethered in a covered shelter. Keep the
Poultry	All stages		<ul> <li>Provide broad-spectrum antihelminthic drugs under vet supervision and recommended doses.</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 adequate clean drinking water+electrolyte and multivitamins</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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Cattle	All stages	FMD	• 1 <sup>st</sup> injection at 6-8 weeks of age, 2 <sup>nd</sup> injection after 6 months of 1 <sup>st</sup>
Mithun		FMD	<ul> <li>injection followed by annual vaccination under vet supervision</li> <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>
Contact Scien	tists (ICAR) or		f or KVK staff for measures against adverse conditions or call 3795-226237/226247

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Agrometeorological Field Unit ICAR, BASAR

### **Agro-met Advisory Bulletin**

(Period: 12<sup>th</sup> to 14<sup>th</sup> April 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: 29/2017/Tue

Dated: 11th April, 2017



Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April 2017
Rainfall = Bomdila: 0.0 mm; Bhalukpong:	Mostly sunny weather with possibility of light rainfall on 12 <sup>th</sup> &
4.2 mm	13 <sup>th</sup> April. Daily maximum and minimum temperature for the
	following period is predicted to be 17-19°C and 4-5°C respectively.
	Expected morning and evening relative humidity will be 54-72%
	and 28-38% respectively. Wind direction is ENE with speed range
	of 5-7 kmph.
Warning:	• NIL

### 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
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider</li> </ul>
	~ .		spacing of 20X15cm.
Maize Pea	Sowing		<ul> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field</li> <li>Sowing of pea recommended for higher altitudes with raised</li> </ul>
	6		<ul> <li>bed of 15-20cm</li> <li>Provide proper drainage to already sown crops</li> </ul>
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> </ul>
C:	rı ·	D 1 .:	VEGETABLES
Citrus	Flowering	Bark eating caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> </ul>
Ginger/Turmeric	Sowing		<ul> <li>Identify healthy plants for seed rhizomes/ collect better seedlings from ICAR Basar or KVK West Siang/Anjaw</li> <li>Keep selected rhizomes for planting material in partial shade for better sprouting.</li> <li>Mulching materials like forest litters or crop residues should be collected in advance</li> <li>Land preparation to a fine tilth to be done before sowing during sunny days</li> <li>Disease free ginger/turmeric rhizome of 30-40 g having atleast 2 eyes to be sown in finely tilth bed of 1m width, 15 cm high and of convenient length at a spacing of 30cm between rows and 25 cm between plants.</li> </ul>

Cole crops	Nursery		Raising nursery can be carried out in higher altitudes/ cold areas
Pre-summer vegetables	Sowing	Nursery insects	<ul> <li>Sowing of pre-summer vegetables like okra, frenchbean etc advocated, avoid during rainy days</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing.</li> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing</li> <li>Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha</li> </ul>
		HORT	ICULTURAL CROPS
Large Cardamom	Sowing	Westernalida	<ul> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> </ul>
Apple	Vegetative	Wooly aphids	Swab the stem with mineral oil against wooly aphid.
			Honey Bees
Honey bees			<ul> <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
Cattle	All stages	FMD	<ul> <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>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <li>Animals should be given lukewarm feed and water.</li> <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</li> </ul>
Poultry	All stages		<ul> <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 adequate clean drinking water+electrolyte and multivitamins</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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
Fishery			Best time to prepare the culture pond like cleaning aquatic weeds
Mithun		FMD	<ul> <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>
Contact Scienti	ists (ICAR) or		f or KVK staff for measures against adverse conditions or call 3795-226237/226247

 $Is sued jointly \ by \ ICAR-RC \ for \ NEH \ Region, Arunachal \ Pradesh \ Centre, \ Basar \ and \ India \ Meteorological \ Department \ Contact: - \underline{IAAS.BASAR@gmail.com}, \ Phone \ Number: -03795-226247/37, -96 \ (Fax)$ 

Agrometeorological Field Unit ICAR, BASAR

### **Agro-met Advisory Bulletin**

( Period: 12th to 14th April 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: 29/2017/Tue

Dated: 11th April, 2017



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

Weather summery of the previous week	Weather forecast valid up to 16 <sup>th</sup> April 2017
Rainfall = 6.4 mm. T. Max: 26.8°C, T. Min:	Variable weather with possibility of light rainfall in few places
12.2°C, RH: 54-97%, Wind Speed: 4-6	on 12 <sup>th</sup> , 14 <sup>th</sup> & 16 <sup>th</sup> April. Daily maximum and minimum
kmph, Wind Direction: NE	temperature for the following period is predicted to be 26-28°C and
	16-18°C respectively. Expected morning and evening relative
	humidity will be 69-82% and 34-54% respectively. Wind direction
	is WNW with speed range of 4-7 kmph.
Warning:	• NIL

### 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

Crop	Stage	Pest/Disease	Precautionary Practices to be followed
			FIELD CROPS
Rice	Nursery/trans plantation	Stem borer	<ul> <li>Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.</li> <li>Cut the tips of the leaves before transplanting reduces the population of stem borer as the eggs are laid on that site. It will reduce the carryover of the infestation to the main field.</li> <li>Careful timing of planting can avoid damage; once the tillering stage is over, attack of some insects reduces.</li> <li>Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population</li> <li>Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days</li> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider</li> </ul>
Pea	Sowing		<ul> <li>spacing of 20X15cm.</li> <li>Sowing of pea recommended for higher altitudes with raised bed of 15-20cm</li> </ul>
Maize	Sowing		<ul><li>Provide proper drainage to already sown crops</li><li>Sowing of Maize advocated</li></ul>
			<ul> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field</li> </ul>
Jhum field	Sowing		<ul> <li>Adopt sowing of leguminous crops like cowpea, frenchbean, soybean etc at 2-3 rows across the slope of jhum field at desirable intervals or ratios with rice to prevent soil erosion and conserve moisture and fertility.</li> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> </ul>
			VEGETABLES
Cole crops	Nursery		Raising nursery can be carried out in higher altitudes/ cold areas
Tomato	Vegetative/ Nursery		<ul> <li>Cover the crop with polyethene/cloths to protect from frost/rain</li> <li>Nursery raising under protected cultivation</li> </ul>
Pre-summer vegetables	Sowing	Nursery insects	<ul> <li>Sowing of pre-summer vegetables like okra, frenchbean etc advocated</li> <li>Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing</li> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing</li> <li>Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha against nursery insects</li> </ul>
Citrus	Flowering	Bark eating caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.</li> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop</li> </ul>

Ginger/Turmeric  Large Cardamom	Sowing		<ul> <li>For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.</li> <li>Identify healthy plants for seed rhizomes/ collect better seedlings from ICAR Basar or KVK West Siang/Anjaw</li> <li>Keep selected rhizomes for planting material in partial shade for better sprouting.</li> <li>Mulching materials like forest litters or crop residues should be collected in advance</li> <li>Land preparation to a fine tilth to be done before sowing during sunny days</li> <li>Disease free ginger/turmeric rhizome of 30-40 g having atleast 2 eyes to be sown in finely tilth bed of 1m width, 15 cm high and of convenient length at a spacing of 30cm between rows and 25 cm between plants.</li> <li>Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching &amp; regular light irrigation.</li> <li>The duration of primary nursery being 3-4 months.</li> </ul>
Apple	Vegetative	Wooly aphids	Swab the stem with mineral oil against wooly aphid.
			Honey Bees
Honey bees			<ul> <li>Box must be covered with straw/dry leaves to provide warmth</li> </ul>
			<ul><li>Provide sugar syrup</li></ul>
Agroforestry			
Toko palm	Nursery		<ul> <li>Filling of nursery polybags for raising of takopalm seedlings</li> </ul>
LIVESTOCKS			
Livestock	Stage	Disease	Precautionary Practices to be followed
Cattle	All stages	FMD	<ul> <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>
Pigs	All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <li>newly born piglets.</li> <li>Animals should be given lukewarm feed and water.</li> <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</li> </ul>
Poultry	All stages		<ul> <li>Give broad-spectrum antihelmintic drugs as per prescribed doses.</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 adequate clean drinking water+electrolyte and multivitamins</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: F/Lasota, 6-7 weeks: Chicken embryo adopted fowl pox vaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter/provide artificial heating and light</li> </ul>
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