## **Agro-met Advisory Bulletin**

(Period: 26th to 28th April 2017)

ग्रामीण कृषि मौसम सेवा



### GRAMIN KRISHI MAUSAM SEWA

(Integrated Agro-Meteorological Advisory Services)

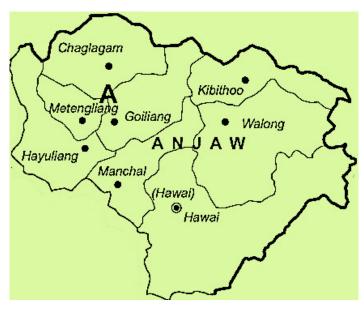


AMFU, ICAR Research Complex for NEH Region Arunachal Pradesh Centre, Basar-791101

**District: Anjaw** 

No: 33/2017/Tue

Dated: 25th April, 2017



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

Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April 2017
No weather summary available	Partly weather with possibility of moderate/rather heavy
	rainfall. Daily maximum and minimum temperature for the
	following period is predicted to be 21-23°C and 17-18°C
	respectively. Expected morning and evening relative humidity will
	be 86-96% and 50-75% respectively. Wind will blow mostly from
	SSE & ENE at a speed range of 3-6 kmph.
Warning:	Heavy rainfall very likely on 25th April

### 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
_	3		FIELD CROPS
Rice	Seedling		<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</li> </ul>
			<ul> <li>Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider spacing of 20X15cm.</li> </ul>
Pea	Seedling		Provide proper drainage to already sown crops
Maize	Knee Height		Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field
Jhum field	Cin -		Provide proper drainage.
Jum Heid	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</li> </ul>
			duration, dwarf and high yielding.
Pre-summer	Seedling	Nursery insects	<ul> <li>VEGETABLES</li> <li>Provide proper drainage to newly transplanted seedlings and</li> </ul>
vegetables	Securing	rearsery insects	follow raised bed for sowing
		HOR'	FICULTURAL CROPS
Orchards	Multiple stages	HOR	<ul> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
Banana	Vegetative		<ul> <li>Planting of banana making pit maintaining at a spacing of 2.5</li> <li>X 2.5 meter plant to plant and row to row distance.</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.
Citrus	Flowering/fruitin g	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>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> <li>Provide adequate drainage</li> </ul>
Apple	Vegetative	Wooly aphids	On clear/dry day, swab the stem with mineral oil against wooly aphid.
		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>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 versupervision 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.</li> <li>F/Lasota, 14-18 days: Intermediate plus/IBD vaccine, 35 days.</li> <li>F/Lasota, 6-7 weeks: Chicken embryo adopted fowl powaccine and 56-70 days: RD R-2B strain.</li> <li>Remove wet litter</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 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 teamer short.</li> </ul>
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-cutaneous route. Pregnant animals above 7 months of pregnancy should be avoided from vaccination.</li> </ul>

## **Agro-met Advisory Bulletin**

(Period: 26th to 28th April 2017)

### ग्रामीण कृषि मौसम सेवा



### GRAMIN KRISHI MAUSAM SEWA

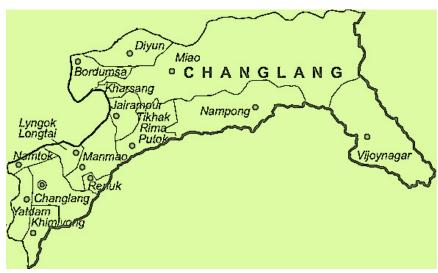
(Integrated Agro-Meteorological Advisory Services)



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

**District: Changlang** 

No: 33/2017/Tue <u>Dated: 25<sup>th</sup> April, 2017</u>



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

Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April 2017
Rainfall = Changlang: 35.4 mm Miao: 15.2	Partly cloudy weather forecasted with moderate/rather heavy
mm	rainfall. Daily maximum and minimum temperature for the
	following period is predicted to be 25-26°C and 19-20°C
	respectively. Expected morning and evening relative humidity will
	be 87-97% and 48-90% respectively. Wind direction is East with
	speed range of 2-4 kmph.
Warning	Heavy rainfall very likely on 25 <sup>th</sup> April

#### 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 B	Sasar recommer	nd poultry variet	y VANARAJA for backyard rearing
Crop	Stage	Pest/Disease	Precautionary Practices to be followed
			FIELD CROPS
Rice	Seedling	Stem borer	<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 spacing of 20X15cm.</li> </ul>
Maize	Knee height		Sowing of maize in higher altitudes advocated in raised bed
			Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing
			VEGETABLES
Pre-summer vegetables	Germination		<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
Banana	Vegetative		<ul> <li>Planting of banana making pit maintaining at a spacing of 2.5 X 2.5 meter plant to plant and row to row distance.</li> </ul>
Orchards  Citrus	Fruiting	Bark eating caterpillar	<ul> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> <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	• 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

		mouth and foot.)	
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

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: 26th to 28th April 2017)

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### 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: 33/2017/Tue Dated: 25<sup>th</sup> April, 2017



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

Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April, 2017
Rainfall = 5.0 mm (Anini)	Partly cloudy sky with possibility of moderate rainfall. Daily
	maximum and minimum temperature for the following period is
	predicted to be 21-23°C and 13-14°C respectively. Expected morning
	and evening relative humidity will be 91-96% and 63-83%
	respectively. Wind direction is E with speed range of 5-6 kmph.
Warning:	Heavy rainfall very likely on 25 <sup>th</sup> April

#### 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	Seedling		Sowing of Maize advocated
			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
Rice	Seedling	Stem borer	Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in
			rice nursery as well as in main field.
			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.
			Follow clean cultivation, presence of grasses near the rice
			crop favors build-up of pest population
			Seedling root dip treatment in 0.02% of Chlorpyriphos
			20EC for 12 hours before transplanting protects the crop
			for 20 to 30 days
			Avoid closer spacing while transplantation which creates
			favorable microclimate for pests in the field. Follow wider
			spacing of 20X15cm.
Jhum field	Sowing		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.
			Carry out seed dressing/treatment with Thiram or
			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.
D	G 11:		VEGETABLES
Pre-summer vegetables	Seedling		Provide proper drainage to newly transplanted seedlings and
vegetables		HODE	follow raised bed for sowing
Orchards		HUK	FICULTURAL CROPS   ● Prepare half moon terraces in fruit crops
Orchards			Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent
			nutrient loss during heavy downpour.
			Follow proper drainage and earthing up practices in low
			land/plain areas to avoid water stagnation in fruit orchards
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.
Citrus	Fruiting	Bark eating	Budding method of propagation (T-budding) to commences in
		caterpillar	oranges using Rangpur lime as rootstock.
			<ul> <li>Cleaning &amp; smearing of trunk base with Bordeaux paste</li> <li>If flowering begins, avoid spray of insecticides/ pesticides as it</li> </ul>
			may affect pollination process.
			<ul> <li>Spray (Planofix) NAA based growth regulator @2m/5lit water</li> </ul>
			during flowering stage in orange plant to reduce fruit/flower
			drop
			• For bark eating caterpillar, remove wooden frass and
			inject Dichlorovos (0.1%) @ 5ml with disposable syringe.
			• Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.
Large Cardamom	Sowing		Should be sown in Primary nursery bed at 2cm deep and 10
	~~6		cm apart followed by mulching & regular light irrigation.
			The duration of primary nursery being 3-4 months.
Apple	Vegetative	Wooly aphids	Swab the stem with mineral oil against wooly aphid.
		<u> </u>	Agroforestry

Honey bees			Honey Bees
Ţ.			
			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>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	mouth and root.)	<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> <li>VK staff for measures against adverse conditions or call at 03795-</li> </ul>

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

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(Period: 26th to 28th April 2017)

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### GRAMIN KRISHI MAUSAM SEWA

(Integrated Agro-Meteorological Advisory Services)

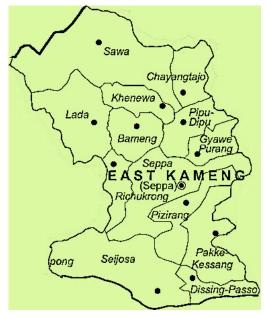


AMFU, ICAR Research Complex for NEH Region Arunachal Pradesh Centre, Basar-791101

### **District: East Kameng**

No: 33/2017/Tue

Dated: 25th April, 2017



Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April 2017
Rainfall = 37.9 mm	<b>Partly cloudy with possibility of light/moderate rainfall.</b> Daily maximum and minimum temperature for the following period is predicted to be 20-22°C and 14-16°C respectively. Expected morning and evening relative humidity will be 93-97% and 62-73% respectively. Expected wind direction is SE with speed range of 3-4 kmph.
Warning:	Heavy rainfall very likely on 25 <sup>th</sup> April

### 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	Seedling	Stem borer	<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 spacing of 20X15cm.</li> </ul>
Maize	Knee height		<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	Seedling		Provide drainage to newly transplanted seedlings
vegetables		HORT	TICULTURAL CROPS
Banana	Vegetative		Planting of banana making pit maintaining at a spacing of 2.5 X 2.5 meter plant to plant and row to row distance.
Orchards			<ul> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
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.
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	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
Гоко 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</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>

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

( Period: 26th to 28th 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: 33/2017/Tue

Dated: 25th April, 2017



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

Weather summery of the previous week	Weather forecast valid up to 26 <sup>th</sup> April 2017
Rainfall: 0.0 mm; T. Max: 33.0°C; T. Min:	Mostly cloudy with possibility of moderate rainfall in most of
21.0°C ; RH: 71-95%	the places. Daily maximum and minimum temperature for the
	following period is predicted to be 28-29°C and 21-22°C
	respectively. Expected morning and evening relative humidity will
	be 92-97% and 70-92% respectively. Expected wind direction is
	variable with speed range of 2-4 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	Seedling  Sowing/ Seedling	Stem borer	<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 spacing of 20X15cm.</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		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.  • Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.  • Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing to avoid fungal infections during rainy days
			VEGETABLES
Pre-summer vegetables	Sowing /seedling	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>
Banana	Vegetative	HORI	Planting of banana making pit maintaining at a spacing of 2.5
Bullullu	regetative		X 2.5 meter plant to plant and row to row distance.
Orchards			<ul> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
Citrus	Flowering/fruitin g	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	Planting material collection/ Land preparation		<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	Sowing		<ul> <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>

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

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

(Period: 26th to 28th 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: 33/2017/Tue

Dated: 25th April, 2017



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

Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April 2016
Past weather summary not available	Partly cloudy weather with possibility of light/moderate rainfall
	in most of the places. Daily maximum and minimum temperature
	for the following period is predicted to be 25-26°C and 18-19°C
	respectively. Expected morning and evening relative humidity will
	be 90-92% and 69-75% respectively. Wind direction is WSW with
	speed range of 2-4 kmph.
Warning	Heavy rainfall very likely on 25th April

#### 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  Jhum field	Seedling	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> <li>Adopt sowing of leguminous crops like cowpea, frenchbean,</li> </ul>
			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.  • Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.  • Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing
Pea	Seedling		Provide proper drainage to already sown crops
			VEGETABLES
Pre-summer vegetables	Sowing/ Seedling	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	ICULTURAL CROPS
Banana	Vegetative		<ul> <li>Planting of banana making pit maintaining at a spacing of 2.5</li> <li>X 2.5 meter plant to plant and row to row distance.</li> </ul>
Citrus	Flowering/ Fruiting	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	Woolerantide	<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.
Talso :: -1:	Name		Agroforestry
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings

			Honey Bees
			Box must be covered with straw/dry leaves to provide
			warmth
			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>Provide adequate bedding material (paddy straw, rice husk) to newly born piglets.</li> <li>Animals should be given lukewarm feed and water.</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 Scien	tists (ICAR) or		f or KVK staff for measures against adverse conditions or call 3795-226237/226247

## **Agro-met Advisory Bulletin**

(Period: 26th to 28th 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: 33/2017/Tue

Dated: 25th April, 2017



Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April, 2017
Rainfall =28.9 mm (Tezu)	Partly cloudy weather with possibility of moderate/rather heavy
	rainfall. Daily maximum and minimum temperature for the following
	period is predicted to be 24-26°C and 18-19°C respectively. Expected
	morning and evening relative humidity will be 85-96% and 45-81%
	respectively. Wind direction is East with speed range of 3-4 kmph.
Warning:	Heavy rainfall very likely on 25th April

### 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
		1	FIELD CROPS
Rice	Seedling	Stem borer	• Rice: Spray Triazophos 40EC @ 4 ml/lit against stem borer in rice nursery as well as in main field.
			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.
			Follow clean cultivation, presence of grasses near the rice
			crop favors build-up of pest population
			• Seedling root dip treatment in 0.02% of Chlorpyriphos
			20EC for 12 hours before transplanting protects the crop
			for 20 to 30 days  • Avoid closer spacing while transplantation which creates
			favorable microclimate for pests in the field. Follow wider
			spacing of 20X15cm.
			VEGETABLES
Cole crops	Nursery		Raising nursery can be carried out in higher altitudes/ cold
			areas
Pre-summer	Sowing/		Sowing of pre-summer vegetables like okra, frenchbean etc.
vegetables	Seedling		advocated, avoid sowing during rainy days
			Carry out seed dressing/treatment with Thiram or
			Carbendazim @ 2g/kg seed before sowing
			Right time for transplanting the ready seedlings of chili,
			tomato, capsicum etc.
			Provide proper drainage to newly transplanted seedlings and
			follow raised bed for sowing.
_		HORT	TCULTURAL CROPS
Banana	Vegetative		<ul> <li>Planting of banana making pit maintaining at a spacing of 2.5</li> <li>X 2.5 meter plant to plant and row to row distance.</li> </ul>
Orchards			Prepare half moon terraces in fruit crops  (orange/hange/apple/paceh) group in steen clarges to provent
			(orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.
			Follow proper drainage and earthing up practices in low
			land/plain areas to avoid water stagnation in fruit orchards
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></ul>
			If flowering begins, avoid spray of insecticides/ pesticides as it
			may affect pollination process.
			Spray (Planofix) NAA based growth regulator @2m/5lit water
			during flowering stage in orange plant to reduce fruit/flower
			<ul> <li>drop</li> <li>For bark eating caterpillar, remove wooden frass and</li> </ul>
			inject Dichlorovos (0.1%) @ 5ml with disposable syringe.
			• Dead wood on the citrus trees should be kept pruned,
			about 2cm, below the dead portion.
Ginger/Turmeric	Sowing		Identify healthy plants for seed rhizomes/ collect better
			seedlings from ICAR Basar or KVK West Siang/Anjaw
			Keep selected rhizomes for planting material in partial shade
			for better sprouting.  Mulching materials like forest litters or even residues should
			Mulching materials like forest litters or crop residues should be collected in advance
			<ul> <li>Land preparation to a fine tilth to be done before sowing</li> </ul>
			during sunny days
			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.

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 Scienti	sts (ICAR) or		or KVK staff for measures against adverse conditions or call 3795-226237/226247

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

( Period: 26th to 28th 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: 33/2017/Tue

Dated: 25th April, 2017



Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April, 2017
Rainfall = 30.5 mm (Roing)	Partly cloudy weather with possibility of moderate/heavy
	rainfall. Daily maximum and minimum temperature for the
	following period is predicted to be 24-25°C and 19-20°C
	respectively. Expected morning and evening relative humidity will be
	87-97% and 52-88% respectively. Wind direction is East with speed
	range of 4-6 kmph.
Warning:	Heavy rainfall very likely on 25 <sup>th</sup> April

### 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
Rice	Seedling	Stem borer	<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 spacing of 20X15cm.</li> </ul>
Maize	Seedling/ Knee height		Follow time isolation of atleast 15 days for two or more different varieties of maize in Jhum field
Pea	Sowing		Sowing of pea recommended for higher altitudes with raised
1 ca	Sowing		bed of 15-20cm
			Provide proper drainage to already sown crops
Jhum field	Sowing		Adopt sowing of leguminous crops like cowpea, frenchbean,
	3		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.
			Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing to avoid fungal
			<ul> <li>Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short</li> </ul>
			duration, dwarf and high yielding.
Calarana	Name		VEGETABLES
Cole crops	Nursery		<ul> <li>Raising nursery can be carried out in higher altitudes/ cold areas</li> </ul>
Pre-summer vegetables	Sowing/ Seedling	Nursery insects	<ul> <li>Sowing of pre-summer vegetables like okra, frenchbean etc advocated</li> </ul>
			<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,</li> </ul>
			<ul> <li>tomato, capsicum etc.</li> <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
		HORT	ICULTURAL CROPS
Banana	Vegetative		<ul> <li>Planting of banana making pit maintaining at a spacing of 2.5</li> <li>X 2.5 meter plant to plant and row to row distance.</li> </ul>
Orchards			<ul> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
Citrus	Flowering / Fruiting	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>

Sowing  Sowing		<ul> <li>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> Agroforestry Filling of nursery polybags for raising of takopalm seedlings
sery		Agroforestry Filling of nursery polybags for raising of takopalm seedlings
sery		Filling of nursery polybags for raising of takopalm seedlings
		Honey Rees
		Honey Dees
		Box must be covered with straw/dry leaves to provide warmth
	I	LIVESTOCKS
Stage	Disease	<b>Precautionary Practices to be followed</b>
and	ID (high fever d appearance of mucous mbrane of the outh and foot.)	
All stages All stages		<ul> <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> </ul>
	•	<ul> <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>Best time to prepare the culture pond like cleaning aquatic weeds</li> </ul>
	All stages	All stages FMD

at 03795-226237/226247

## **Agro-met Advisory Bulletin**

(Period: 26th to 28th 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: 33/2017/Tue

Dated: 25th April, 2017



Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April 2017
Rainfall = $0.0 \text{ mm}$ (Ziro)	Partly cloudy with possibility of light/moderate rainfall. Daily
	maximum and minimum temperature for the following period is
	predicted to be 24-25°C and 16-18°C respectively. Expected
	morning and evening relative humidity will be 94-97% and 71-78%
	respectively. Wind direction is SSW with speed range of 2-3 kmph.
Warning:	Heavy rainfall very likely on 25th April

#### **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	Seedling	Stem borer	<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 spacing of 20X15cm.</li> </ul>
Maize	Sowing/ Seedling		<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>
Pre-summer	Sowing /	Nursery insects	VEGETABLES
vegetables	Seedling	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>
		HORT	TICULTURAL CROPS
Banana Orchards	Vegetative		<ul> <li>Planting of banana making pit maintaining at a spacing of 2.5 X 2.5 meter plant to plant and row to row distance.</li> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> </ul>
Citrus	Flowering/fruitin g	Bark eating caterpillar	<ul> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</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 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

			Keep selected rhizomes for planting material in partial shade	
			for better sprouting.	
			<ul> <li>Mulching materials like forest litters or crop residues should be collected in advance</li> </ul>	
			Land preparation to a fine tilth to be done before sowing	
			during sunny days	
			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.	
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.	
Kiwi	Planting		• Pit size: 60cmX60cmX60cm	
			<ul> <li>Spacing: 6mX4m (Plant to plant and row to row)</li> <li>In kiwi the male and female plants are borne on different</li> </ul>	
			vines. So a male plant is provided for pollination of 6-8 plants	
			at every third plant from the second row.	
			• Pit filling: mixture of top soil, 20-30kg FYM along with	
			chloropyriphos@25-30g/pit (to avoid insect damage)	
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			<ul> <li>Box must be covered with straw/dry leaves to provide</li> </ul>	
			warmth	
			LIVESTOCKS	
Livestock	Stage	Disease	Precautionary Practices to be followed	
Pigs	All stages	FMD (high fever	E	
		and appearance of mucous		
		membrane of the	• 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	
		mouth and foot.)	age followed by aimaal vaccination ander vet supervision	
Poultry	All stages		Give broad-spectrum antihelmintic drugs as per prescribed	
			doses.	
			• Follow 'All in All out' system of rearing and do not rear birds of different age groups together.	
			<ul> <li>Avoid overcrowding.</li> </ul>	
			Provide adequate clean drinking water+electrolyte and multi-	
			vitamins	
			Vaccination as per the schedule with proper consultation with vet.	
			➤ 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.	
			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	
			<ul><li>Separate sick animals</li><li>The animal should be washed with lukewarm water added with</li></ul>	
			little potash (KMnO <sub>4</sub> ) or neem leaves	
			Long hair near the udder/stomach/back legs should be teamed	
			short.	
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.	
Contact Scien	tiete (ICAD) er	State Agnil Staff	• Pregnant animals above 7 months of pregnancy should be avoided.  for KVK staff for measures against adverse conditions or call	
Contact Scien	usts (ICAK) or		3795-226237/226247	
at 05/95-22025//22024/				

## **Agro-met Advisory Bulletin**

( Period: 26th to 28th 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: 33/2017/Tue <u>Dated: 25<sup>th</sup> April, 2017</u>



Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April 2017
Rainfall: 43.7 mm; T. Max: 32.0°C; T. Min: 19.0°C; RH: 75-93%	Partly cloudy weather with possibility light/moderate rainfall. Daily maximum and minimum temperature for the following period is predicted to be 24-25°C and 19-20°C respectively. Expected morning and evening relative humidity will be 94-97% and 55-73% respectively. Expected wind direction is E with speed range of 2-4 kmph.
Warning:	Heavy rainfall very likely on 25 <sup>th</sup> April

### 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
7.			FIELD CROPS
Rice	Seedling  Sowing/ Seedling	Stem borer	<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 spacing of 20X15cm.</li> <li>Sowing of Maize advocated</li> <li>Carry out seed dressing/treatment with Thiram or</li> </ul>
			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,
			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.
			Carry out seed dressing/treatment with Thiram or
			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.
Pre-summer	Sowing		<b>VEGETABLES</b> ■ Sowing of pre-summer vegetables like French bean, capsicum
vegetables	/Seedling		• Sowing of pre-summer vegetables like French bean, capsicum etc advocated, avoid during rainy days.
			• Seed treatment with Imidichloropid @ 1-2g/10kg is
		VIO DE	recommended before sowing
Ough and a	I	HORT	CICULTURAL CROPS
Orchards	Vacatativa		<ul> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
Banana	Vegetative		<ul> <li>Planting of banana making pit maintaining at a spacing of 2.5</li> <li>X 2.5 meter plant to plant and row to row distance.</li> </ul>
Citrus	Flowering/ Fruiting	Bark eating caterpillar	<ul> <li>Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.</li> </ul>
	Č	caterpinal	<ul> <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  Toko palm	Sowing		<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>Agroforestry</li> <li>Filling of nursery polybags for raising of takopalm seedlings</li> </ul>
			Honey Bees
Honey bees			Box must be covered with straw/dry leaves to provide warmth
			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.)	
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  Contact Scien	ticts (ICAD) 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>
Contact Scien	usis (ICAN) 01		3795-226237/226247

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

(Period: 26th to 28th 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: 33/2017/Tue

Dated: 25th April, 2017



Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April 2017
Rainfall = 0.0 mm	Mostly cloudy weather with possibility of moderate rainfall.
	Daily maximum and minimum temperature for the following period
	is predicted to be 13-14°C and 3-4°C respectively. Expected
	morning and evening relative humidity will be 77-91% and 54-78%
	respectively. Wind direction is mainly WSW with probable speed
	range of 4-7 kmph.
Warning:	Heavy rainfall very likely on 25 <sup>th</sup> April

### 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
Dies	G 111		FIELD	CROPS
Rice	Seedling  Sowing/	Stem borer	•	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. Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population  Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days  Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider spacing of 20X15cm.  Sowing of Maize advocated
	Seedling		•	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, 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.  Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.  Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing
Cole crops	Nursery	Π	VEGE.	Raising nursery can be carried out in higher altitudes/ cold
Pre-summer vegetables	Sowing /Seedling	Nursery insects	•	areas Provide adequate drainage to already sown crops Right time for transplanting the ready seedlings of chili,
vegetables	/Securing		•	tomato, capsicum etc.  Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing  Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500 litres water/ha against nursery insects
Onahanda		HORT	<u>ICULT</u>	CURAL CROPS
Orchards  Banana	Vegetative		•	Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.  Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards  Desuckering (removing excess numbers of suckers arising
			•	from the mother plant) should be followed
Citrus	Flowering	Bark eating caterpillar	•	Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.  Cleaning & smearing of trunk base with Bordeaux paste  If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.  Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop  For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.  Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.
Large Cardamom	Sowing		•	Should be sown in Primary nursery bed at 2cm deep and 10 cm apart followed by mulching & regular light irrigation.

Apple  Toko palm	Vegetative	Wooly aphids	
oko palm		in the second second	<ul> <li>Swab the stem with mineral oil against wooly aphid.</li> </ul>
Toko palm			Agroforestry
•	Nursery		Filling of nursery polybags for raising of takopalm seedlings
			Honey Bees
Honey bees			<ul> <li>Provide sugar syrup near the box</li> </ul>
			Add insulation and ventilation systems
			LIVESTOCKS
Livestock	Stage	Disease	Precautionary Practices to be followed
Pigs	All stages	FMD (high fever	E
		and appearance	• Keep the houses dry and clean.
		of mucous membrane of the	• 1 <sup>st</sup> injection at 6 months of age and 2 <sup>nd</sup> injection at 12 months of
		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.
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	ntists (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>Tor KVK staff for measures against adverse conditions or call</li> </ul>

## **Agro-met Advisory Bulletin**

(Period: 26th to 28th 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: 33/2017/Tue

Dated: 25th April, 2017



Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April, 2017
Rainfall = 51.4 mm (Deomali)	Partly cloudy with possibility of light/moderate rainfall in most
	of the places. Daily maximum and minimum temperature for the
	following period is predicted to be 26-29°C and 18-20°C
	respectively. Expected morning and evening relative humidity will
	be 95-100% and 58-92% respectively. Wind direction is SE with
	speed range of 2 kmph.
Warning:	Heavy rainfall very likely on 25 <sup>th</sup> April

### **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  Maize  Jhum field  Pre-summer vegetables	Seedling  Sowing/ Seedling  Sowing  Sowing  Sowing	Stem borer  Nursery insects	
			<ul> <li>tomato, capsicum etc.</li> <li>Provide proper drainage to newly transplanted seedlings and</li> </ul>
			follow raised bed for sowing
D	X7	HORT	CICULTURAL CROPS
Banana	Vegetative		<ul> <li>Planting of banana making pit maintaining at a spacing of 2.5</li> <li>X 2.5 meter plant to plant and row to row distance.</li> </ul>
Orchards			<ul> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
Cinagg/Turmorio	Flowering/fruitin	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

			<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> </ul>
			• 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.
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>
	l	'	Agroforestry
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings
	-		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.)	•
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	State Agril Staff	f or KVK staff for measures against adverse conditions or call

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

at 03795-226237/226247

# **Agro-met Advisory Bulletin**

(Period: 26th to 28th 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: 33/2017/Tue

Dated: 25th April, 2017



Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April, 2017
Rainfall = 46.4 mm (Tuting)	Partly cloudy sky with possibility of light/moderate rainfall.
	Daily maximum and minimum temperature for the following period
	is predicted to be 22-24°C and 15-16°C respectively. Expected
	morning and evening relative humidity will be 79-88% and 59-69%
	respectively. Wind direction is SSE & S with speed range of 4
	kmph.
Warning:	Heavy rainfall very likely on 25th April

#### 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
D:			FIELD CROPS
Pea	Seedling  Sowing/	Stem borer	<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 spacing of 20X15cm.</li> <li>Sowing of pea recommended for higher altitudes with raised</li> </ul>
	Seedling		<ul> <li>bed of 15-20cm</li> <li>Provide proper drainage to already sown crops</li> </ul>
Maize	Sowing/ Seedling		<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>
	1		VEGETABLES
Pre-summer vegetables	Sowing/ Seedling	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>
D.	TT	HORT	TCULTURAL CROPS
Banana	Vegetative		Planting of banana making pit maintaining at a spacing of 2.5 X 2.5 meter plant to plant and row to row distance.
Orchards			<ul> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
Citrus	Flowering/ Fruiting	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</li> </ul>

			<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> </ul>
Ginger/Turmeric  Large Cardamom	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> <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			<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>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	mouth and root.	<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>
	(10111) 01		3795-226237/226247

Agrometeorological Field Unit ICAR, BASAR

# **Agro-met Advisory Bulletin**

( Period: 26th to 28th April 2017)

ग्रामीण कृषि मौसम सेवा



### GRAMIN KRISHI MAUSAM SEWA

(Integrated Agro-Meteorological Advisory Services)

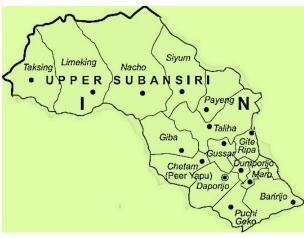


AMFU, ICAR Research Complex for NEH Region Arunachal Pradesh Centre, Basar-791101

**District: Upper Subansiri** 

No: 33/2017/Tue

Dated: 25th April, 2017



Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April 2017		
Rainfall = 0.0 mm (Puchi Geko); Daporijo:	Partly cloudy with possibility of light/moderate rainfall in most		
2.8 mm	of the places. Daily maximum and minimum temperature for the		
	following period is predicted to be 24-25°C and 19-20°C		
	respectively. Expected morning and evening relative humidity will		
	be 90-95% and 73-82% respectively. Expected wind direction is		
	variable with speed range of 2-3 kmph.		
Warning	Heavy rainfall very likely on 25th April		

#### 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

Rice Seedling Stem borer   Cut the tips of the leaves before transplanting reduces population of stem borer as the eggs are laid on that sit will reduce the carryover of the infestation to the main field  Careful timing of planting can avoid damage; once tillering stage is over, attack of some insects reduces. Follow clean cultivation, presence of grasses near the crop favors build-up of pest population Seedling root dip treatment in 0.02% of Chlorpyrig 20EC for 12 hours before transplanting protects the for 20 to 30 days Avoid closer spacing while transplantation which cre favorable microclimate for pests in the field. Follow we spacing of 20X15cm.  Maize Sowing/ Seedling Sowing of Maize advocated Carry out seed dressing/treatment with Thiram Carbendazim @ 2g/kg seed before sowing Follow time isolation of atleast 15 days for two or in different varieties of maize in Jhum field Sowing of pea recommended for higher altitudes with rabed of 15-20cm Provide proper drainage to already sown crops  Adopt sowing of leguminous crops like cowpea, frencht soybean et at 2-3 rows across the slope of jhum field desirable intervals or ratios with rice to prevent soil ero and conserve moisture and fertility. Cowpea variety (Kashi Kanchan) and Frenchbean va (Selection-9) are advocated for intercropping as they are a duration, dwarf and high yielding. Carbendazim @ 2g/kg seed before sowing  VEGETABLES  Pre-summer vegetables Presummer Vegetative Provide proper drainage to newly transplanted seedlings follow raised bed for sowing  HORTICULTURAL CROPS Planting of banana making pit maintaining at a spacing of X 2.5 meter plant to plant and row to row distance. Prepare half moon terraces in fruit of corrage/banana/apple/peachty grown in steep slopes to pre nutrient loss during heavy downpour. Follow proper drainage and earling up practices in land/plain areas to avoid water stagnation in fruit orchards and plain areas to avoid water stagnation in fruit orchards and plain areas to avoid water stagnation in fruit orchards and plain are	Crop	Stage	Pest/Disease	Precautionary Practices to be followed
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Bed of 15-20cm	Pea	Sowing		
Sowing   Adopt sowing of leguminous crops like cowpea, frencht soybean etc at 2-3 rows across the slope of jhum field desirable intervals or ratios with rice to prevent soil erd and conserve moisture and fertility.    Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are subject of duration, dwarf and high yielding.   Carry out seed dressing/treatment with Thiram Carbendazim @ 2g/kg seed before sowing		2		
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land/plain areas to avoid water stagnation in fruit orchards	Orchards			(orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.
Citrus Flowering/ Bark eating • Budding method of propagation (T-hudding) to commence				land/plain areas to avoid water stagnation in fruit orchards
Fruiting caterpillar oranges using Rangpur lime as rootstock.  Cleaning & smearing of trunk base with Bordeaux paste  If flowering begins, avoid spray of insecticides/ pesticides may affect pollination process.  Spray (Planofix) NAA based growth regulator @2m/5lit v during flowering stage in orange plant to reduce fruit/flowering stage in orange plant stage stage fruit/flowering stage stage stage stage stage st	Citrus	Flowering/ Fruiting	Bark eating caterpillar	<ul> <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</li> </ul>
inject Dichlorovos (0.1%) @ 5ml with disposable syring				<ul> <li>inject Dichlorovos (0.1%) @ 5ml with disposable syringe.</li> <li>Dead wood on the citrus trees should be kept pruned,</li> </ul>
Ginger/Turmeric Sowing  • Identify healthy plants for seed rhizomes/ collect better seedlings from ICAR Basar or KVK West Siang/Anjaw	Ginger/Turmeric	Sowing		Identify healthy plants for seed rhizomes/ collect better
				Keep selected rhizomes for planting material in partial shade
				Mulching materials like forest litters or crop residues should

Large Cardamom Banana Apple	Sowing  Bunching  Vegetative	Cold Wooly aphids	<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>Timely/regular removal of extra suckers, dry leaves &amp; pseudosteam</li> <li>Swab the stem with mineral oil against wooly aphid.</li> </ul>
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings
Honey bees			<ul> <li>Honey Bees</li> <li>Provide sugar syrup near the box</li> <li>Add insulation and ventilation systems</li> <li>LIVESTOCKS</li> </ul>
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>Provide adequate bedding material (paddy straw, rice husk) to newly born piglets.</li> <li>Animals should be given lukewarm feed and water.</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  Mithun  Contact Scient	All stages	FMD FMD State Agril Staff	<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>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>

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

Agrometeorological Field Unit ICAR, BASAR

# **Agro-met Advisory Bulletin**

(Period: 26th to 28th 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: 33/2017/Tue

Dated: 25th April, 2017



Weather summery of the previous week	Weather forecast valid up to 30 <sup>th</sup> April 2017
Rainfall = Bomdila: 0.0 mm; Bhalukpong:	Partly cloudy weather with possibility of moderate rainfall.
8.4 mm	Daily maximum and minimum temperature for the following period
	is predicted to be 16-17°C and 6-7°C respectively. Expected
	morning and evening relative humidity will be 88-95% and 58-76%
	respectively. Wind direction is S with speed range of 2-4 kmph.
Warning:	Heavy rainfall very likely on 25 <sup>th</sup> April

## 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
7.	0 111		
Rice	Seedling	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</li> </ul>
			favorable microclimate for pests in the field. Follow wider
			spacing of 20X15cm.
Maize	Sowing/ Seedling		<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>
Pea	Sowing		Sowing of pea recommended for higher altitudes with raised
			bed of 15-20cm
			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> </ul>
			• Carry out seed dressing/treatment with Thiram or
			Carbendazim @ 2g/kg seed before sowing
			VEGETABLES
Banana	Vegetative		<ul> <li>Planting of banana making pit maintaining at a spacing of 2.5</li> <li>X 2.5 meter plant to plant and row to row distance.</li> </ul>
Orchards			<ul> <li>Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.</li> <li>Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards</li> </ul>
Citrus	Flowering/ Fruiting	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>

			7 1 2 4 6 411 1 1 1 6			
			Land preparation to a fine tilth to be done before sowing  during average days.			
			during sunny days			
			• 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.			
Cole crops	Nursery		Raising nursery can be carried out in higher altitudes/ cold			
Core crops	11025019		areas			
Pre-summer	Sowing	Nursery insects	Sowing of pre-summer vegetables like okra, frenchbean etc			
vegetables	8	j	advocated, avoid during rainy days			
			• Carry out seed dressing/treatment with Thiram or			
			Carbendazim @ 2g/kg seed before sowing.			
			<ul> <li>Right time for transplanting the ready seedlings of chili, tomato, capsicum etc.</li> </ul>			
			Provide proper drainage to newly transplanted seedlings and			
			follow raised bed for sowing			
			• Spray Azadirachtin 1% (10000 PPM) @ 1000-1500 ml in 500			
			litres water/ha			
		HORT	ICULTURAL CROPS			
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.			
Apple	Vegetative	Wooly aphids	• Swab the stem with mineral oil against wooly aphid.			
			Honey Bees			
Honey bees			Provide sugar syrup near the box			
			Add insulation and ventilation systems			
	LIVESTOCKS					
			Precautionary Practices to be followed			
Livestock	Stage	Disease	Precautionary Practices to be followed			
Livestock Cattle	Stage All stages	<b>Disease</b> 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>			
			• 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			
			<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> </ul>			
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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>			
		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>Animals should be given lukewarm feed and water.</li> </ul>			
Cattle	All stages	FMD (high fever and appearance	<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>Animals should be given lukewarm feed and water.</li> <li>Keep the houses dry and clean.</li> </ul>			
Cattle	All stages	FMD (high fever and appearance of mucous membrane of the	<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>Animals should be given lukewarm feed and water.</li> </ul>			
Cattle	All stages All stages	FMD (high fever and appearance of mucous	<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>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>			
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Pigs  Poultry  Fishery	All stages All stages	FMD (high fever and appearance of mucous membrane of the mouth and foot.)	<ul> <li>Ist 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 (KMnO₄) or neem leaves</li> <li>Long hair near the udder/stomach/back legs should be teamed short.</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> </ul>			
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 $Contact: \hbox{-} \ \underline{IAAS.BASAR@gmail.com}, Phone \ Number: \hbox{-} \ 03795\hbox{-} 226247/37, \hbox{-} 96 \ (Fax)$ 

Agrometeorological Field Unit ICAR, BASAR

## **Agro-met Advisory Bulletin**

( Period: 26th to 28th 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: 33/2017/Tue

Dated: 25th 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 30 <sup>th</sup> April 2017
Rainfall = 59.4 mm. T. Max: 26.7°C, T.	Partly cloudy with possibility of light/moderate rainfall in most
Min: 15.1°C, RH: 63-94%, Wind Speed: 5-6	of the places. Daily maximum and minimum temperature for the
kmph, Wind Direction: SW	following period is predicted to be 25-26°C and 19-20°C
	respectively. Expected morning and evening relative humidity will
	be 89-96% and 68-91% respectively. Wind direction is WNW with
	speed range of 4-5 kmph.
Warning:	Heavy rainfall very likely on 25th April

#### **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	
Rice	Seedling  Seedling/Knee height	Stem borer	•	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.  Follow clean cultivation, presence of grasses near the rice crop favors build-up of pest population  Seedling root dip treatment in 0.02% of Chlorpyriphos 20EC for 12 hours before transplanting protects the crop for 20 to 30 days  Avoid closer spacing while transplantation which creates favorable microclimate for pests in the field. Follow wider spacing of 20X15cm.  Sowing of Maize advocated  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, 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.  Cowpea variety (Kashi Kanchan) and Frenchbean variety (Selection-9) are advocated for intercropping as they are short duration, dwarf and high yielding.  Carry out seed dressing/treatment with Thiram or Carbendazim @ 2g/kg seed before sowing
7	G 11:	<b>X</b>	VEGE'	<u> </u>
Pre-summer vegetables	Seedling	Nursery insects	•	Provide proper drainage to newly transplanted seedlings and follow raised bed for sowing
		HORT	CICULT	TURAL CROPS
Banana	Vegetative		•	Planting of banana making pit maintaining at a spacing of 2.5 X 2.5 meter plant to plant and row to row distance.
Orchards			•	Prepare half moon terraces in fruit crops (orange/banana/apple/peach) grown in steep slopes to prevent nutrient loss during heavy downpour.  Follow proper drainage and earthing up practices in low land/plain areas to avoid water stagnation in fruit orchards
Banana			•	Desuckering (removing excess numbers of suckers arising from the mother plant) should be followed
Citrus	Flowering/fruitin g	Bark eating caterpillar	•	Budding method of propagation (T-budding) to commences in oranges using Rangpur lime as rootstock.  Cleaning & smearing of trunk base with Bordeaux paste  If flowering begins, avoid spray of insecticides/ pesticides as it may affect pollination process.  Spray (Planofix) NAA based growth regulator @2m/5lit water during flowering stage in orange plant to reduce fruit/flower drop  For bark eating caterpillar, remove wooden frass and inject Dichlorovos (0.1%) @ 5ml with disposable syringe.  Dead wood on the citrus trees should be kept pruned, about 2cm, below the dead portion.
Ginger/Turmeric	Sowing		•	Identify healthy plants for seed rhizomes/ collect better seedlings from ICAR Basar or KVK West Siang/Anjaw Keep selected rhizomes for planting material in partial shade for better sprouting.  Mulching materials like forest litters or crop residues should be collected in advance
			•	Land preparation to a fine tilth to be done before sowing

Large Cardamom  Honey bees	Sowing		<ul> <li>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>Honey Bees</li> <li>Box must be covered with straw/dry leaves to provide</li> </ul>
			<ul><li>warmth</li><li>Provide sugar syrup</li></ul>
			Agroforestry
Toko palm	Nursery		Filling of nursery polybags for raising of takopalm seedlings
			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>Provide adequate bedding material (paddy straw, rice husk) to 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>
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 Scientists (ICAR) or State Agril Staff or KVK staff for measures against adverse conditions or call at 03795-226237/226247			

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