

Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 22nd July, 2016

Tamenglong

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23rd to 27th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (19th to 21st July, 2016)

The sky remained mainly cloudy to overcast and rainfall of 6.4 mm was recorded during past three days. Maximum temperature range observed was 28.0 to 31.2 $^{\circ}$ C, range of minimum temperature observed was 22.1 to 22.4 $^{\circ}$ C, mean relative humidity observed in morning and afternoon were 87.33 % and 71.33 % respectively. The average wind speed range was 3.1 to 5.9 km/hr.

Weather forecast for next five days of Tamenglong $(23^{rd}\ to\ 27^{th}\ July,\ 2016)$

Likely to have light rain and heavy rain at isolated places. Sky will remain mainly cloudy to overcast, with maximum temp. 29 - 31 $^{\rm o}$ C & minimum temp. 22 - 24 $^{\rm o}$ C. Relative humidity may reach upto 100 % (max RH) & 98 % (min RH). The average wind speed may be 2 km/hr. Wind direction may be Westerly to North - Westerly during the next five days.

Weather Outlook for subsequent 2 days from 27th July to 29th July 2016 Rainfall at many places very likely over northeastern states Weather warning for next five days *

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Field Crops Main kharif rice	Transplanting to Establishment		 In replanting flooding fields, prepare rice nurseries in raised beds with RC- Maniphou 7. During final leveling apply fertilizer @ 65kg Urea, 250 kg SSP and 33kg MOP as basal dose before transplanting seedlings. Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25x10cm using beaded rope. Maintain a thin film of water upto 7 days after transplanting. Release excess water if accumulated due to rain. Thinning may be done in rice fields where plant population is high and replant in area where plants have died due to flood.
		Thrips & Leaf folder	> Spray Lambdacyhothrin 5% EC @ 15 ml/ 15 lit of water.
Kharif maize	Cob formation to maturity		 Weeding may be done on sunny days to control weeds/ insect-pest. Maintain proper drainage system to avoid water logging. Mature cobs may be harvested.
Soybean	Sowing to vegetative		 Maintain proper drainage system to avoid water logging If not sown early, sowing must be done during July. Keep the plot clean to avoid hairy caterpillars. Hand weeding should be done before 30-35 days after sowing. For control of red hairy caterpillars in crops at vegetative stage, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water)
Storage (seed)			> Dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in godowns.
Horticulture Crops			
Turmeric/ Ginger	Vegetative to rhizome formation	Leaf spot disease	> Spray Redomil MZ-72 WP @ 2g/lit of water alternatively with Carbendazim @ 2g/ lit of water at 14 days interval.
		Rhizome rot	 To prevent rhizome rot spray Redomil MZ 72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times. For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
Bhindi	Fruiting to harvesting	Jassids	➤ Infested leaf curl upward in margin. If small young nymphs of different colours are found on the underside of the leaves, spray Monocrotophos 36EC @ 1 ml / lit of water after harvesting the mature fruits.



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Turmeric/ Coria	nder	Intercropping Sowing				 Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. High density sowing at a spacing of 5 cm x 10 cm may also be done. 	
Cowpea						 Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. Recommended varieties: Yard long bean & Pusa Barsati. 	
Cucurbits (Water melon, pumpkin gourd, etc.)		Vegetat	ive/harvest			 Avoid water stagnation in the root zone, harvest the mature ones. Avoid the fruits to touch the ground by staking or with the support of dried twigs. 	
Passion Fruit		Floweri	ng to	Fruit rot		- Spray Metalxyl + Mancozeb @ 2 g/litr water at 7 days interval	
		fruiting		Fruit fly		- Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ha.	
				Brown Sp	ot	- Remove the infected leaves and burn. Spray Zineb @ 2 mg/ltr water.	
				Termite		- Apply Chloropyriphos 10%G @ 25 kg/ha into the soil.	
				Collar rot		- Drench the soil of collar region with 1% Bordeaux mixture	
Animal Science Name of the	Growt	h stage	Disease/ in	festation		Agro-meteorological advisories	
animal Do not let anima	ls to graze	e in fodder	fields now, as	at the time	of sudder	n growth in fodder after long submergence presence of cyanide has been found.	
Poultry		groups	Care & man			not give muddy water as there is chance of <i>colibacillosis</i> during the rainy	
(Chicken/		8F			sea	son.	
Turkey/ Duck)						e water sanitizer in drinking water/potassium per magnate (few grains)	
			Considionia	Coccidiosis		ep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly. e Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be	
			Coccidiosis			ociated.	
			Deworming			e Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with	
			`	halt		f the dose.	
Sheep/ Goat	_	groups	Care & man	agement		ep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture	
	excepts young					blem ve multivitamins @15ml orally	
	, , , , , , ,				➤ Use	e quality disinfectants for disinfecting the surrounding of the sheds. days after shearing sheep, their bodies should be drenched with Butox @ 2ml/	
						water. Use medicated water for drenching.	
			De-worming		➤ De-worming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wl.		
Pig	All age	groups	Care and ma			neral mixture be added in feed @10-20 g/adult animal.	
8	except			C	➤ Tre	at drinking water with potassium permanganate/ sanitizer.	
	young o	ones	3.5%			vide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds	
			Mites infest Enteric dise			ay with Skin Heal Spray in sufficient quantity. E Livocin @ 7.5 mg per kg b.wt. 3-5 days.	
			Diarrhoea &			ompt treatment with Antibiotics Sulpha drugs.	
			Deworming			ve Piperazine liquid @ 10-15ml orally once only.	
Cattle	All age excepts young	ge groups B.Q./ H.S/F pts the		MD		he animals have not yet been vaccinated, give vaccine, now for Black Quarter, emorrhagic septicaemia, Foot & Mouth Disease, Enterotoxaemia etc.	
	, 8		Endoparas	ites	> De-	worm orally once using Nilzan-F @ 90ml/ 300 kg body weight.	
			Care & man			he animals do not have access to green fodders, vitamin E injection/	
						plements should be given.	
						od supplements may be given @20-30 gm/animals. not let animals graze in irrigated fodder fields/meadows.	
						er the birth of the self the new born must be fed with Colostrum within the first	
						b hours.	
						ve Calmore Forte @100ml orally once daily.	
			Milk Fever		➤ Pro	tect from milk fever by giving daily a mixture of calcium and phosphorus @	

70-100ml.



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Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish. Encircle the pond with net or bamboo mat as a preventive measure for flood.
		Feed	Fish feed should be provided @ 10-15 % body weight per day.
		Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
	Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	Sampling of fish for growth, disease (if any) should be done by regular netting.
			Partial harvesting of marketable size fishes are also recommended
		Fish	 Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches. 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.
			Feeding should be done @ 2% body weigh5t per day.
Integrated Fish Farming	Pig		➤ About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		 200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.



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Thoubal

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Weather forecast for next five days of Thoubal $(23^{rd}\ to\ 27^{th}\ July,\ 2016)$

Likely to have light rain and heavy rain at isolated places. Sky will remain mainly cloudy to overcast, with maximum temp. 28 - 30 $^{\circ}$ C & minimum temp. 21 - 23 $^{\circ}$ C. Relative humidity may reach upto 99 % (max RH) & 98 % (min RH). The average wind speed may be 2 - 4 km/hr. Wind direction may be Westerly to North - Westerly during the next five days.

Weather Outlook for subsequent 2 days from 27th July to 29th July 2016 Rainfall at many places very likely over northeastern states Weather warning for next five days *

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Main kharif rice	Transplanting to Establishment		➤ In replanting flooding fields, prepare rice nurseries in raised beds with RC- Maniphou 7.
			 During final leveling apply fertilizer @ 65kg Urea, 250 kg SSP and 33kg MOP as basal dose before transplanting seedlings. Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25x10cm using beaded rope. Maintain a thin film of water upto 7 days after transplanting. Release excess water if accumulated due to rain.
			> Thinning may be done in rice fields where plant population is high and replant in area where plants have died due to flood.
		Thrips & Leaf folder	➤ Spray Lambdacyhothrin 5% EC @ 15 ml/ 15 lit of water.
Kharif maize	Cob formation to maturity		 Weeding may be done on sunny days to control weeds/ insect-pest. Maintain proper drainage system to avoid water logging. Mature cobs may be harvested.
Soybean	Sowing to vegetative		 Maintain proper drainage system to avoid water logging If not sown early, sowing must be done during July.
			 Keep the plot clean to avoid hairy caterpillars. Hand weeding should be done before 30-35 days after sowing. For control of red hairy caterpillars in crops at vegetative stage, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05%
			(0.6ml/ lit of water)
Storage (seed)			> Dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in godowns.
Horticulture Crops			
Turmeric/ Ginger	Vegetative to rhizome formation	Leaf spot disease	> Spray Redomil MZ-72 WP @ 2g/lit of water alternatively with Carbendazim @ 2g/lit of water at 14 days interval.
		Rhizome rot	To prevent rhizome rot spray Redomil MZ 72 W.P. @ 2 g/lit of water at 15 days interval for 2-3 times.
			For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
Bhindi	Fruiting to harvesting	Jassids	➤ Infested leaf curl upward in margin. If small young nymphs of different colours are found on the underside of the leaves, spray Monocrotophos 36EC @ 1 ml / lit of water after harvesting the mature fruits.



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Turmeric/ Coriander Intercro Cowpea Sowing					 Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. High density sowing at a spacing of 5 cm x 10 cm may also be done. Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. Recommended varieties: Yard long bean & Pusa Barsati. 		
Cucurbits (Water melon, pumpking gourd, etc.)		Vegetat	tive/harvest			 Avoid water stagnation in the root zone, harvest the mature ones. Avoid the fruits to touch the ground by staking or with the support of dried twigs. 	
Passion Fruit		Floweri	ing to	Fruit rot		- Spray Metalxyl + Mancozeb @ 2 g/litr water at 7 days interval	
		fruiting		Fruit fly		- Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ha.	
				Brown Sp	ot	- Remove the infected leaves and burn. Spray Zineb @ 2 mg/ltr water.	
				Termite		- Apply Chloropyriphos 10%G @ 25 kg/ha into the soil.	
				Collar rot		- Drench the soil of collar region with 1% Bordeaux mixture	
Animal Science			1				
Name of the animal	Growt	h stage	Disease/ in	festation		Agro-meteorological advisories	
	ls to graz	e in fodder	fields now, as	s at the time	of sudde	n growth in fodder after long submergence presence of cyanide has been found.	
Poultry (Chicken/	All age	groups			sea	not give muddy water as there is chance of <i>colibacillosis</i> during the rainy son.	
Turkey/ Duck)					 Use water sanitizer in drinking water/potassium per magnate (few grains) Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly 		
			Coccidiosis		➤ Use	e Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be ociated.	
			Deworming		> Use	e Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with f the dose.	
Sheep/ Goat All age groups excepts the young ones		Care & management		pro > Giv > Use > 21	ep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture oblem we multivitamins @15ml orally e quality disinfectants for disinfecting the surrounding of the sheds. days after shearing sheep, their bodies should be drenched with Butox @ 2ml/		
			De-worming	g	> De	water. Use medicated water for drenching. -worming of animals should be done using Abendazole/Levamisole @7.5 //kg b.wt. or Ivermectin @50mg/kg b. wl.	
Pig	All age except young		Care and ma	anagement	> Mi	neral mixture be added in feed @10-20 g/adult animal. eat drinking water with potassium permanganate/ sanitizer. evide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds	
			Mites infestation Enteric disease Diarrhoea & Dysentry		 Spray with Skin Heal Spray in sufficient quantity. Use Livocin @ 7.5 mg per kg b.wt. 3-5 days. Prompt treatment with Antibiotics Sulpha drugs. 		
Cattle	All age groups excepts the young ones		Deworming B.Q./ H.S/F		➤ If t	ve Piperazine liquid @ 10-15ml orally once only. he animals have not yet been vaccinated, give vaccine, now for Black Quarter, emorrhagic septicaemia, Foot & Mouth Disease, Enterotoxaemia etc.	
			Endoparas	ites	> De	-worm orally once using Nilzan-F @ 90ml/ 300 kg body weight.	
			Care & mar	agement	sup Foo Do Aft	he animals do not have access to green fodders, vitamin E injection/ pplements should be given. od supplements may be given @20-30 gm/animals. not let animals graze in irrigated fodder fields/meadows. ter the birth of the self the new born must be fed with Colostrum within the first o hours.	
			Milk Fever		> Pro	we Calmore Forte @100ml orally once daily. otect from milk fever by giving daily a mixture of calcium and phosphorus @ 100ml	

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Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish. Encircle the pond with net or bamboo mat as a preventive measure for flood.
		Feed	Fish feed should be provided @ 10-15 % body weight per day.
		Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
	Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	 Sampling of fish for growth, disease (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended
		Fish	 Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches. 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.
Integrated Fish	Pig		 Feeding should be done @ 2% body weigh5t per day. About 30-40 two months old pigs may be kept for proper fertilization of the one had proved Pigs are feed on much at an average of the day. Group grasses or enjmel.
Farming			pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		 200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.



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"Gramin Krishi Mausam Seva"



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Ukhrul

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Weather forecast for next five days of Ukhrul $(23^{rd}\ to\ 27^{th}\ July,2016)$

Likely to have light rain and heavy rain at isolated places. Sky will remain mainly cloudy to overcast, with maximum temp. 27 - 29 $^{\circ}$ C & minimum temp. 19 - 21 $^{\circ}$ C. Relative humidity may reach upto 99 % (max RH) & 93 % (min RH). The average wind speed may be 2 - 3 km/hr. Wind direction may be Westerly to North - Westerly during the next five days.

Weather Outlook for subsequent 2 days from 27th July to 29th July 2016 Rainfall at many places very likely over northeastern states Weather warning for next five days *

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Main kharif rice	Transplanting to Establishment		➤ In replanting flooding fields, prepare rice nurseries in raised beds with RC- Maniphou 7.
			 During final leveling apply fertilizer @ 65kg Urea, 250 kg SSP and 33kg MOP as basal dose before transplanting seedlings. Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25x10cm using beaded rope. Maintain a thin film of water upto 7 days after transplanting. Release excess water if accumulated due to rain.
			 Thinning may be done in rice fields where plant population is high and replant in area where plants have died due to flood.
		Thrips & Leaf folder	➤ Spray Lambdacyhothrin 5% EC @ 15 ml/ 15 lit of water.
Kharif maize	Cob formation to maturity		 Weeding may be done on sunny days to control weeds/insect-pest. Maintain proper drainage system to avoid water logging. Mature cobs may be harvested.
Soybean	Sowing to vegetative		 Maintain proper drainage system to avoid water logging If not sown early, sowing must be done during July.
			 Keep the plot clean to avoid hairy caterpillars. Hand weeding should be done before 30-35 days after sowing. For control of red hairy caterpillars in crops at vegetative stage, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05%
			(0.6ml/ lit of water)
Storage (seed)			> Dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in godowns.
Horticulture Crops			· · ·
Turmeric/ Ginger	Vegetative to rhizome formation	Leaf spot disease	> Spray Redomil MZ-72 WP @ 2g/lit of water alternatively with Carbendazim @ 2g/ lit of water at 14 days interval.
		Rhizome rot	To prevent rhizome rot spray Redomil MZ 72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
			For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
Bhindi	Fruiting to harvesting	Jassids	➤ Infested leaf curl upward in margin. If small young nymphs of different colours are found on the underside of the leaves, spray Monocrotophos 36EC @ 1 ml / lit of water after harvesting the mature fruits.



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Cucurbits (Water melon, pumpkin gourd, etc.)		Vegetat	ive/harvest			 Avoid water stagnation in the root zone, harvest the mature ones. Avoid the fruits to touch the ground by staking or with the support of dried twigs. 	
Passion Fruit		Floweri	ng to	Fruit rot		- Spray Metalxyl + Mancozeb @ 2 g/litr water at 7 days interval	
		fruiting		Fruit fly		- Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ha.	
				Brown Sp	ot	- Remove the infected leaves and burn. Spray Zineb @ 2 mg/ltr water.	
				Termite		- Apply Chloropyriphos 10%G @ 25 kg/ha into the soil.	
				Collar rot		- Drench the soil of collar region with 1% Bordeaux mixture	
Animal Science Name of the	Growt	h stage	Disease/ in	festation		Agro-meteorological advisories	
animal Do not let anima	ls to graze	e in fodder	fields now, as	s at the time	of sudder	n growth in fodder after long submergence presence of cyanide has been found.	
Poultry		groups	Care & man			not give muddy water as there is chance of <i>colibacillosis</i> during the rainy	
(Chicken/		8F			sea	son.	
Turkey/ Duck)	rkey/ Duck)					e water sanitizer in drinking water/potassium per magnate (few grains)	
			Coccidiosis	Coccidiosis		ep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly. e Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be	
			Coccidiosis			ociated.	
			Deworming			e Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with	
GI / G /	A 11		`			f the dose.	
Sheep/ Goat	All age	groups	Care & management			ep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture blem	
	young				➢ Giv	ve multivitamins @15ml orally	
					➤ 21	e quality disinfectants for disinfecting the surrounding of the sheds. days after shearing sheep, their bodies should be drenched with Butox @ 2ml/water. Use medicated water for drenching.	
			De-worming		➤ De-worming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wl.		
Pig	All age except young		Care and ma	anagement	> Tre	neral mixture be added in feed @10-20 g/adult animal. at drinking water with potassium permanganate/ sanitizer. wide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds	
	young	ones	Mites infest	ation		ray with Skin Heal Spray in sufficient quantity.	
			Enteric dise			e Livocin @ 7.5 mg per kg b.wt. 3-5 days.	
			Diarrhoea &			mpt treatment with Antibiotics Sulpha drugs.	
C 44	A 11		Deworming			ve Piperazine liquid @ 10-15ml orally once only.	
Cattle	excepts			MD		he animals have not yet been vaccinated, give vaccine, now for Black Quarter, emorrhagic septicaemia, Foot & Mouth Disease, Enterotoxaemia etc.	
			Endoparas	ites	> De-	worm orally once using Nilzan-F @ 90ml/ 300 kg body weight.	
			Care & man	agement		he animals do not have access to green fodders, vitamin E injection/	
						plements should be given.	
						od supplements may be given @20-30 gm/animals. not let animals graze in irrigated fodder fields/meadows.	
						er the birth of the self the new born must be fed with Colostrum within the first	
					two	hours.	
			MULT			ve Calmore Forte @100ml orally once daily.	
			Milk Fever	Milk Fever		tect from milk fever by giving daily a mixture of calcium and phosphorus @	

70-100ml.



Manipur Centre, Lamphelpat, Imphal - 795 004





Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish. Encircle the pond with net or bamboo mat as a preventive measure for flood.
		Feed	Fish feed should be provided @ 10-15 % body weight per day.
		Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
	Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
	Feed	Sampling of fish for growth, disease (if any) should be done by regular netting.	
			Partial harvesting of marketable size fishes are also recommended
		Fish	 Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches. 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.
			Feeding should be done @ 2% body weigh5t per day.
Integrated Fish Farming	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		> 200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN 22nd July, 2016

Bishnupur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23rd to 27th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (19th to 21st July, 2016)

The sky remained mainly cloudy to overcast and rainfall of 6.4 mm was recorded during past three days. Maximum temperature range observed was 28.0 to 31.2 $^{\circ}$ C, range of minimum temperature observed was 22.1 to 22.4 $^{\circ}$ C, mean relative humidity observed in morning and afternoon were 87.33 % and 71.33 % respectively. The average wind speed range was 3.1 to 5.9 km/hr.

Weather forecast for next five days of Bishnupur $(23^{rd}\ to\ 27^{th}\ July,\ 2016)$

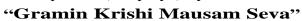
Likely to have light rain and heavy rain at isolated places. Sky will remain mainly cloudy to overcast, with maximum temp. 28 - 30 $^{\circ}$ C & minimum temp. 22 - 23 $^{\circ}$ C. Relative humidity may reach upto 100 % (max RH) & 98 % (min RH). The average wind speed may be 2-4 km/hr. Wind direction may be Westerly to North - Westerly during the next five days.

Weather Outlook for subsequent 2 days from 27th July to 29th July 2016 Rainfall at many places very likely over northeastern states Weather warning for next five days *

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			1
Main kharif rice	Transplanting to Establishment		➤ In replanting flooding fields, prepare rice nurseries in raised beds with RC- Maniphou 7.
			 During final leveling apply fertilizer @ 65kg Urea, 250 kg SSP and 33kg MOP as basal dose before transplanting seedlings. Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25x10cm using beaded rope. Maintain a thin film of water upto 7 days after transplanting. Release
			excess water if accumulated due to rain. > Thinning may be done in rice fields where plant population is high and
		Thrips & Leaf	replant in area where plants have died due to flood. > Spray Lambdacyhothrin 5% EC @ 15 ml/ 15 lit of water.
		folder	Spray Lambdacyhothrin 5% EC @ 15 ml/ 15 lit of water.
Kharif maize	Cob formation to maturity		 Weeding may be done on sunny days to control weeds/ insect-pest. Maintain proper drainage system to avoid water logging. Mature cobs may be harvested.
Soybean	Sowing to vegetative		 Maintain proper drainage system to avoid water logging If not sown early, sowing must be done during July.
			 Keep the plot clean to avoid hairy caterpillars. Hand weeding should be done before 30-35 days after sowing. For control of red hairy caterpillars in crops at vegetative stage, dust 5%
			Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water)
Storage (seed)			> Dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in godowns.
Horticulture Crops		1	
Turmeric/ Ginger	Vegetative to rhizome formation	Leaf spot disease	Spray Redomil MZ-72 WP @ 2g/lit of water alternatively with Carbendazim @ 2g/ lit of water at 14 days interval.
		Rhizome rot	To prevent rhizome rot spray Redomil MZ 72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
			For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
Bhindi	Fruiting to harvesting	Jassids	➤ Infested leaf curl upward in margin. If small young nymphs of different colours are found on the underside of the leaves, spray Monocrotophos 36EC @ 1 ml / lit of water after harvesting the mature fruits.



Manipur Centre, Lamphelpat, Imphal - 795 004





Turmeric/ Coria	nder	Intercro	pping			 Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. High density sowing at a spacing of 5 cm x 10 cm may also be done. 	
Cowpea		Sowing				 Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. Recommended varieties: Yard long bean & Pusa Barsati. 	
Cucurbits (Water melon, pumpking gourd, etc.)		Vegetat	ive/harvest			 Avoid water stagnation in the root zone, harvest the mature ones. Avoid the fruits to touch the ground by staking or with the support of dried twigs. 	
Passion Fruit		Floweri	ng to	Fruit rot		- Spray Metalxyl + Mancozeb @ 2 g/litr water at 7 days interval	
		fruiting		Fruit fly		- Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ha.	
				Brown Sp	ot	- Remove the infected leaves and burn. Spray Zineb @ 2 mg/ltr water.	
				Termite		- Apply Chloropyriphos 10%G @ 25 kg/ha into the soil.	
				Collar rot		- Drench the soil of collar region with 1% Bordeaux mixture	
Animal Science			Discount in	C	ì	A and most analysis of a lateration	
Name of the animal	Growtl	1 stage	Disease/ in	iestation		Agro-meteorological advisories	
	ls to graze	in fodder	fields now, as	at the time	of sudden	growth in fodder after long submergence presence of cyanide has been found.	
Poultry (Chicken/ Turkey/ Duck)	All age	groups	Care & man	agement	seas	not give muddy water as there is chance of <i>colibacillosis</i> during the rainy son. water sanitizer in drinking water/potassium per magnate (few grains)	
•						p the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.	
			Coccidiosis			Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated.	
			Deworming		 Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next of half the dose. 		
Sheep/ Goat	All age groups excepts the young ones		Care & man	agement	prol Figure Giv Figure Use Figure 21 c	p the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture blem e multivitamins @15ml orally quality disinfectants for disinfecting the surrounding of the sheds. lays after shearing sheep, their bodies should be drenched with Butox @ 2ml/vater. Use medicated water for drenching.	
			De-worming		 De-worming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wl. 		
Pig	All age except t	the	Care and ma		> Trea	neral mixture be added in feed @10-20 g/adult animal. at drinking water with potassium permanganate/ sanitizer. wide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds	
		Mites infest Enteric dise Diarrhoea &		ase Dysentry	> Use > Pro	ay with Skin Heal Spray in sufficient quantity. Livocin @ 7.5 mg per kg b.wt. 3-5 days. mpt treatment with Antibiotics Sulpha drugs.	
Cattle	All age excepts young o			MD > If th		e Piperazine liquid @ 10-15ml orally once only. e animals have not yet been vaccinated, give vaccine, now for Black Quarter, morrhagic septicaemia, Foot & Mouth Disease, Enterotoxaemia etc.	
		Endoparas				worm orally once using Nilzan-F @ 90ml/ 300 kg body weight.	
			Care & man	agement	supy Foo Do Afte	the animals do not have access to green fodders, vitamin E injection/plements should be given. It is given a general g	
			Milk Fever		> Pro	tect from milk fever by giving daily a mixture of calcium and phosphorus @ 100ml.	



Manipur Centre, Lamphelpat, Imphal - 795 004





Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish. Encircle the pond with net or bamboo mat as a preventive measure for flood.
		Feed	Fish feed should be provided @ 10-15 % body weight per day.
		Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval 	
	Feed	 Sampling of fish for growth, disease (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended 	
		Fish	 Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches. 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.
			Feeding should be done @ 2% body weigh5t per day.
Integrated Fish Farming	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		➤ 200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pone



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN 22nd July, 2016

Chandel

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23rd to 27th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (19th to 21st July, 2016)

The sky remained mainly cloudy to overcast and rainfall of 6.4 mm was recorded during past three days. Maximum temperature range observed was 28.0 to 31.2 $^{\circ}$ C, range of minimum temperature observed was 22.1 to 22.4 $^{\circ}$ C, mean relative humidity observed in morning and afternoon were 87.33 % and 71.33 % respectively. The average wind speed range was 3.1 to 5.9 km/hr.

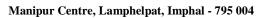
Weather forecast for next five days of Chandel $(23^{rd}\ to\ 27^{th}\ July,\ 2016)$

Likely to have light rain and heavy rain at isolated places. Sky will remain mainly cloudy to overcast, with maximum temp. 27 - 29 $^{\circ}$ C & minimum temp. 19 - 21 $^{\circ}$ C. Relative humidity may reach upto 99 % (max RH) & 96 % (min RH). The average wind speed may be 0 – 2 km/hr. Wind direction may be Westerly to North - Westerly during the next five days.

Weather Outlook for subsequent 2 days from 27th July to 29th July 2016 Rainfall at many places very likely over northeastern states Weather warning for next five days *

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			1
Main kharif rice	Transplanting to Establishment		➤ In replanting flooding fields, prepare rice nurseries in raised beds with RC- Maniphou 7.
			 During final leveling apply fertilizer @ 65kg Urea, 250 kg SSP and 33kg MOP as basal dose before transplanting seedlings. Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25x10cm using beaded rope. Maintain a thin film of water upto 7 days after transplanting. Release excess water if accumulated due to rain.
			> Thinning may be done in rice fields where plant population is high and
		Thrips & Leaf folder	replant in area where plants have died due to flood. > Spray Lambdacyhothrin 5% EC @ 15 ml/ 15 lit of water.
Kharif maize	Cob formation to maturity		 Weeding may be done on sunny days to control weeds/insect-pest. Maintain proper drainage system to avoid water logging. Mature cobs may be harvested.
Soybean	Sowing to vegetative		 Maintain proper drainage system to avoid water logging If not sown early, sowing must be done during July.
			 Keep the plot clean to avoid hairy caterpillars. Hand weeding should be done before 30-35 days after sowing. For control of red hairy caterpillars in crops at vegetative stage, dust 5%
			Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water)
Storage (seed)			> Dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in godowns.
Horticulture Crops		1	
Turmeric/ Ginger	Vegetative to rhizome formation	Leaf spot disease	> Spray Redomil MZ-72 WP @ 2g/lit of water alternatively with Carbendazim @ 2g/ lit of water at 14 days interval.
		Rhizome rot	To prevent rhizome rot spray Redomil MZ 72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
			For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
Bhindi	Fruiting to harvesting	Jassids	➤ Infested leaf curl upward in margin. If small young nymphs of different colours are found on the underside of the leaves, spray Monocrotophos 36EC @ 1 ml / lit of water after harvesting the mature fruits.









Turmeric/ Coria	iander Intercropping		pping			 Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. High density sowing at a spacing of 5 cm x 10 cm may also be done.
Cowpea Sowing		ng			 - Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. - Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. - Recommended varieties: Yard long bean & Pusa Barsati. 	
Cucurbits (Water melon, pumpking gourd, etc.)		Vegetat	ive/harvest			 Avoid water stagnation in the root zone, harvest the mature ones. Avoid the fruits to touch the ground by staking or with the support of dried twigs.
Passion Fruit		Floweri	ng to	Fruit rot		- Spray Metalxyl + Mancozeb @ 2 g/litr water at 7 days interval
		fruiting	-	Fruit fly		- Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ha.
				Brown Sp	ot	- Remove the infected leaves and burn. Spray Zineb @ 2 mg/ltr water.
				Termite		- Apply Chloropyriphos 10%G @ 25 kg/ha into the soil.
				Collar rot		- Drench the soil of collar region with 1% Bordeaux mixture
Animal Science	es	1				
Name of the animal	Growtl	h stage	Disease/ in	festation		Agro-meteorological advisories
	ls to graze	e in fodder	fields now, as	at the time	of sudden	growth in fodder after long submergence presence of cyanide has been found.
Poultry (Chicken/ Turkey/ Duck) Sheep/ Goat Pig	All age groups Coccidios Dewormi All age groups excepts the young ones Care & m De-worm All age groups except the young ones Mites infe Enteric di		Care & man Coccidiosis Deworming Care & man De-worming Care and ma Mites infest. Enteric dise. Diarrhoea &	season. > Use water sanitizer in drinking water/potassium per magnate (few grains) > Keep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it processor. > Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can associated. > Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next dathalf the dose. agement > Keep the animals on the platform if possible to avoid *Pneumonia** due to moint problem > Give multivitamins @15ml orally > Use quality disinfectants for disinfecting the surrounding of the sheds. > 21 days after shearing sheep, their bodies should be drenched with Butox @1 lit water. Use medicated water for drenching. > De-worming of animals should be done using Abendazole/Levamisole @7.5 mg/kg b.wt. or Ivermectin @50mg/kg b. wl. **Mineral mixture be added in feed @10-20 g/adult animal.** > Treat drinking water with potassium permanganate/ sanitizer. > Provide ample ventilation in the shed/ dry bedding. Avoid dampness in shed ation ase > Spray with Skin Heal Spray in sufficient quantity. > Use Livocin @ 7.5 mg per kg b.wt. 3-5 days. > Prompt treatment with Antibiotics Sulpha drugs.		
Cattle All age excepts young o		the			 If the Hae De- If the supplement of the suppl	e Piperazine liquid @ 10-15ml orally once only. the animals have not yet been vaccinated, give vaccine, now for Black Quarter smorrhagic septicaemia, Foot & Mouth Disease, Enterotoxaemia etc. worm orally once using Nilzan-F @ 90ml/ 300 kg body weight. the animals do not have access to green fodders, vitamin E injection/ plements should be given. d supplements may be given @20-30 gm/animals. not let animals graze in irrigated fodder fields/meadows. er the birth of the self the new born must be fed with Colostrum within the first
			Milk Fever		➤ Giv	hours. e Calmore Forte @100ml orally once daily. tect from milk fever by giving daily a mixture of calcium and phosphorus @

70-100ml.



Manipur Centre, Lamphelpat, Imphal - 795 004





Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture		Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish. Encircle the pond with net or bamboo mat as a preventive measure for flood.
		Feed	Fish feed should be provided @ 10-15 % body weight per day.
		Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
	Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
	Feed	Sampling of fish for growth, disease (if any) should be done by regular netting.	
			Partial harvesting of marketable size fishes are also recommended
		Fish	 Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches. 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.
			Feeding should be done @ 2% body weigh5t per day.
Integrated Fish Farming	Pig		➤ About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		 200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN 22nd July, 2016

Churachandpur

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23rd to 27th July, 2016 as below:

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Weather forecast for next five days of Churachandpur $(23^{\rm rd}\ to\ 27^{\rm th}\ July,\ 2016)$

Likely to have light rain and heavy rain at isolated places. Sky will remain mainly cloudy to overcast, with maximum temp. 29 - 31 $^{\circ}$ C & minimum temp. 21 - 23 $^{\circ}$ C. Relative humidity may reach upto 100 % (max RH) & 98 % (min RH). The average wind speed may be 2 - 4 km/hr. Wind direction may be Westerly to North - Westerly during the next five days.

Weather Outlook for subsequent 2 days from 27th July to 29th July 2016 Rainfall at many places very likely over northeastern states Weather warning for next five days *

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Main kharif rice	Transplanting to Establishment		➤ In replanting flooding fields, prepare rice nurseries in raised beds with RC- Maniphou 7.
			 During final leveling apply fertilizer @ 65kg Urea, 250 kg SSP and 33kg MOP as basal dose before transplanting seedlings. Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25x10cm using beaded rope. Maintain a thin film of water upto 7 days after transplanting. Release excess water if accumulated due to rain.
			> Thinning may be done in rice fields where plant population is high and
			replant in area where plants have died due to flood.
		Thrips & Leaf folder	> Spray Lambdacyhothrin 5% EC @ 15 ml/ 15 lit of water.
Kharif maize	Cob formation to maturity		 Weeding may be done on sunny days to control weeds/insect-pest. Maintain proper drainage system to avoid water logging. Mature cobs may be harvested.
Soybean	Sowing to vegetative		 Maintain proper drainage system to avoid water logging If not sown early, sowing must be done during July.
			➤ Keep the plot clean to avoid hairy caterpillars. Hand weeding should be done before 30-35 days after sowing.
			For control of red hairy caterpillars in crops at vegetative stage, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water)
Storage (seed)			➤ Dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in godowns.
Horticulture Crops			
Turmeric/ Ginger	Vegetative to rhizome formation	Leaf spot disease	> Spray Redomil MZ-72 WP @ 2g/lit of water alternatively with Carbendazim @ 2g/ lit of water at 14 days interval.
		Rhizome rot	To prevent rhizome rot spray Redomil MZ 72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
			For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
Bhindi	Fruiting to harvesting	Jassids	➤ Infested leaf curl upward in margin. If small young nymphs of different colours are found on the underside of the leaves, spray Monocrotophos 36EC @ 1 ml / lit of water after harvesting the mature fruits.



Manipur Centre, Lamphelpat, Imphal - 795 004





Turmeric/ Coria	neric/ Coriander Intercropping		pping			 Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. High density sowing at a spacing of 5 cm x 10 cm may also be done. 	
Cowpea Sowing					 Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. Recommended varieties: Yard long bean & Pusa Barsati. 		
Cucurbits (Water melon, pumpking gourd, etc.)		Vegetat	ive/harvest			 Avoid water stagnation in the root zone, harvest the mature ones. Avoid the fruits to touch the ground by staking or with the support of dried twigs. 	
Passion Fruit		Floweri		Fruit rot		- Spray Metalxyl + Mancozeb @ 2 g/litr water at 7 days interval	
		fruiting		Fruit fly		- Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ha.	
				Brown Sp	ot	- Remove the infected leaves and burn. Spray Zineb @ 2 mg/ltr water.	
				Termite		- Apply Chloropyriphos 10%G @ 25 kg/ha into the soil.	
				Collar rot		- Drench the soil of collar region with 1% Bordeaux mixture	
Animal Science			1		i .		
Name of the animal	Growth	1 stage	Disease/ in	festation		Agro-meteorological advisories	
	ls to graze	in fodder	fields now, as	at the time	of sudden	growth in fodder after long submergence presence of cyanide has been found.	
Poultry (Chicken/	All age		Care & man			not give muddy water as there is chance of <i>colibacillosis</i> during the rainy	
Turkey/ Duck)						water sanitizer in drinking water/potassium per magnate (few grains)	
· · · · · · · · · · · · · · ·					> Kee	p the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.	
			Coccidiosis			Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be	
						ciated. Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with	
			Deworming			the dose.	
Sheep/ Goat	All age excepts		Care & management			p the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture blem	
	young					e multivitamins @15ml orally	
						quality disinfectants for disinfecting the surrounding of the sheds.	
			De-worming			lays after shearing sheep, their bodies should be drenched with Butox @ 2ml/vater. Use medicated water for drenching.	
					De-worming of animals should be done using Abendazole/Levamisole @7.5		
						kg b.wt. or Ivermectin @50mg/kg b. wl.	
Pig	All age		s Care and management			eral mixture be added in feed @10-20 g/adult animal.	
	except t					at drinking water with potassium permanganate/ sanitizer.	
	young o	ones	Mites infest	ation		wide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds ay with Skin Heal Spray in sufficient quantity.	
			Enteric dise			Livocin @ 7.5 mg per kg b.wt. 3-5 days.	
			Diarrhoea &		> Pro	mpt treatment with Antibiotics Sulpha drugs.	
			Deworming			e Piperazine liquid @ 10-15ml orally once only.	
Cattle	Cattle All age groups excepts the young ones		B.Q./ H.S/F	MD		e animals have not yet been vaccinated, give vaccine, now for Black Quarter, morrhagic septicaemia, Foot & Mouth Disease, Enterotoxaemia etc.	
			Endoparas	ites	➤ De-	worm orally once using Nilzan-F @ 90ml/ 300 kg body weight.	
			Care & man	agement		e animals do not have access to green fodders, vitamin E injection/ plements should be given.	
					> Foo	d supplements may be given @20-30 gm/animals.	
						not let animals graze in irrigated fodder fields/meadows.	
						er the birth of the self the new born must be fed with Colostrum within the first hours.	
						e Calmore Forte @100ml orally once daily.	
			Milk Fever		> Prot	ect from milk fever by giving daily a mixture of calcium and phosphorus @	
					70-1	100ml.	



Manipur Centre, Lamphelpat, Imphal - 795 004



"Gramin Krishi Mausam Seva"

Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Carp culture Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish. Encircle the pond with net or bamboo mat as a preventive measure for flood.
		Feed	Fish feed should be provided @ 10-15 % body weight per day.
		Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
	Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	 Sampling of fish for growth, disease (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended
		Fish	 Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	 Water depth of the field can be increase by pumping or draining if water is available to continue the culture. 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches. 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.
Integrated Fish Farming	Pig		 Feeding should be done @ 2% body weigh5t per day. About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		➤ 200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 22nd July, 2016

Imphal East

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23rd to 27th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (19th to 21st July, 2016)

The sky remained mainly cloudy to overcast and rainfall of 6.4 mm was recorded during past three days. Maximum temperature range observed was 28.0 to 31.2 $^{\circ}$ C, range of minimum temperature observed was 22.1 to 22.4 $^{\circ}$ C, mean relative humidity observed in morning and afternoon were 87.33 % and 71.33 % respectively. The average wind speed range was 3.1 to 5.9 km/hr.

Weather forecast for next five days of Imphal East $(23^{rd}\ to\ 27^{th}\ July,\ 2016)$

Likely to have light rain and heavy rain at isolated places on Friday. Sky will remain mainly cloudy to overcast, with maximum temp. 29 - 30 $^{\circ}$ C & minimum temp. 22 - 23 $^{\circ}$ C. Relative humidity may reach upto 99 % (max RH) & 97 % (min RH). The average wind speed may be 2-3 km/hr. Wind direction may be Westerly to North - Westerly during the next five days.

Weather Outlook for subsequent 2 days from 27th July to 29th July 2016 Rainfall at many places very likely over northeastern states Weather warning for next five days *

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops	"	I	1
Field Crops Main kharif rice	Transplanting to Establishment		 In replanting flooding fields, prepare rice nurseries in raised beds with RC- Maniphou 7. During final leveling apply fertilizer @ 65kg Urea, 250 kg SSP and 33kg MOP as basal dose before transplanting seedlings. Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25x10cm using beaded rope. Maintain a thin film of water upto 7 days after transplanting. Release excess water if accumulated due to rain. Thinning may be done in rice fields where plant population is high and
		Thrips & Leaf folder	replant in area where plants have died due to flood. > Spray Lambdacyhothrin 5% EC @ 15 ml/ 15 lit of water.
Kharif maize	Cob formation to maturity		 Weeding may be done on sunny days to control weeds/ insect-pest. Maintain proper drainage system to avoid water logging. Mature cobs may be harvested.
Soybean	Sowing to vegetative		 Maintain proper drainage system to avoid water logging If not sown early, sowing must be done during July. Keep the plot clean to avoid hairy caterpillars. Hand weeding should be done before 30-35 days after sowing. For control of red hairy caterpillars in crops at vegetative stage, dust 5% Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water)
Storage (seed)			➤ Dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in godowns.
Horticulture Crops		1	
Turmeric/ Ginger	Vegetative to rhizome formation	Leaf spot disease	Spray Redomil MZ-72 WP @ 2g/lit of water alternatively with Carbendazim @ 2g/lit of water at 14 days interval.
		Rhizome rot	 To prevent rhizome rot spray Redomil MZ 72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times. For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
Bhindi	Fruiting to harvesting	Jassids	➤ Infested leaf curl upward in margin. If small young nymphs of different colours are found on the underside of the leaves, spray Monocrotophos 36EC @ 1 ml / lit of water after harvesting the mature fruits.



Manipur Centre, Lamphelpat, Imphal - 795 004





Turmeric/ Coria	nder	Intercro	pping			 Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. High density sowing at a spacing of 5 cm x 10 cm may also be done. 	
Cowpea	ypea Sowing				 Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. Recommended varieties: Yard long bean & Pusa Barsati. 		
Cucurbits (Water melon, pumpkin gourd, etc.)		Vegetat	ive/harvest			 Avoid water stagnation in the root zone, harvest the mature ones. Avoid the fruits to touch the ground by staking or with the support of dried twigs. 	
Passion Fruit		Floweri	ng to	Fruit rot		- Spray Metalxyl + Mancozeb @ 2 g/litr water at 7 days interval	
		fruiting		Fruit fly		- Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ha.	
				Brown Sp	ot	- Remove the infected leaves and burn. Spray Zineb @ 2 mg/ltr water.	
				Termite		- Apply Chloropyriphos 10%G @ 25 kg/ha into the soil.	
				Collar rot		- Drench the soil of collar region with 1% Bordeaux mixture	
Animal Science Name of the animal	Growtl	h stage	Disease/ in	festation		Agro-meteorological advisories	
	ls to graze	e in fodder	fields now, as	at the time	of sudden	n growth in fodder after long submergence presence of cyanide has been found.	
Poultry (Chicken/ Turkey/ Duck)	All age		Care & man		Do seasUse	not give muddy water as there is chance of <i>colibacillosis</i> during the rainy son. e water sanitizer in drinking water/potassium per magnate (few grains) ep the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.	
			Coccidiosis	S Use		Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be ociated. Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with	
			Deworming		half the dose.		
Sheep/ Goat	heep/ Goat All age groups excepts the young ones		Care & management		prol Giv Use 21 c	ep the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture blem re multivitamins @15ml orally equality disinfectants for disinfecting the surrounding of the sheds. days after shearing sheep, their bodies should be drenched with Butox @ 2ml/vater. Use medicated water for drenching.	
			De-worming			worming of animals should be done using Abendazole/Levamisole @7.5 /kg b.wt. or Ivermectin @50mg/kg b. wl.	
Pig	except the young ones Mi En:		Care and ma	nnagement	> Mir	neral mixture be added in feed @ 10-20 g/adult animal. at drinking water with potassium permanganate/ sanitizer. vide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds	
			Mites infestation Enteric disease Diarrhoea & Dysentry		> Spr. > Use > Pro:	ay with Skin Heal Spray in sufficient quantity. Livocin @ 7.5 mg per kg b.wt. 3-5 days. mpt treatment with Antibiotics Sulpha drugs.	
Cattle	excepts	Deworming All age groups xcepts the roung ones			➤ If th	re Piperazine liquid @ 10-15ml orally once only. ne animals have not yet been vaccinated, give vaccine, now for Black Quarter, remorrhagic septicaemia, Foot & Mouth Disease, Enterotoxaemia etc.	
	7		Endoparas Care & man		➤ If th	worm orally once using Nilzan-F @ 90ml/ 300 kg body weight. ne animals do not have access to green fodders, vitamin E injection/	
				> Food > Do > After two > Giv	plements should be given. od supplements may be given @20-30 gm/animals. not let animals graze in irrigated fodder fields/meadows. er the birth of the self the new born must be fed with Colostrum within the first o hours. re Calmore Forte @100ml orally once daily.		
			Milk Fever	Milk Fever		tect from milk fever by giving daily a mixture of calcium and phosphorus @ 100ml.	



Manipur Centre, Lamphelpat, Imphal - 795 004





Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish. Encircle the pond with net or bamboo mat as a preventive measure for flood.
		Feed	Fish feed should be provided @ 10-15 % body weight per day.
		Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
	Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	 Sampling of fish for growth, disease (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended
		Fish	 Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches. 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.
			Feeding should be done @ 2% body weigh5t per day.
Integrated Fish Farming	Pig		About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		➤ 200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.



Manipur Centre, Lamphelpat, Imphal - 795 004





MANIPUR BULLETIN 22nd July, 2016

Imphal West

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23rd to 27th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (19th to 21st July, 2016)

The sky remained mainly cloudy to overcast and rainfall of 6.4 mm was recorded during past three days. Maximum temperature range observed was 28.0 to 31.2 $^{\circ}$ C, range of minimum temperature observed was 22.1 to 22.4 $^{\circ}$ C, mean relative humidity observed in morning and afternoon were 87.33 % and 71.33 % respectively. The average wind speed range was 3.1 to 5.9 km/hr.

Weather forecast for next five days of Imphal West $(23^{rd}\ to\ 27^{th}\ July,\ 2016)$

Likely to have light rain and heavy rain at isolated places on Friday. Sky will remain mainly cloudy to overcast, with maximum temp. 29 - 31 $^{\rm o}$ C & minimum temp. 21 - 23 $^{\rm o}$ C. Relative humidity may reach upto 100 % (max RH) & 97 % (min RH). The average wind speed may be 2 km/hr. Wind direction may be Southerly to South-Westerly during the next five days.

Weather Outlook for subsequent 2 days from 27th July to 29th July 2016 Rainfall at many places very likely over northeastern states Weather warning for next five days *

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Main kharif rice	Transplanting to Establishment		➤ In replanting flooding fields, prepare rice nurseries in raised beds with RC- Maniphou 7.
			 During final leveling apply fertilizer @ 65kg Urea, 250 kg SSP and 33kg MOP as basal dose before transplanting seedlings. Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25x10cm using beaded rope. Maintain a thin film of water upto 7 days after transplanting. Release
			excess water if accumulated due to rain. > Thinning may be done in rice fields where plant population is high and
			replant in area where plants have died due to flood.
		Thrips & Leaf folder	> Spray Lambdacyhothrin 5% EC @ 15 ml/ 15 lit of water.
Kharif maize	Cob formation to maturity		 Weeding may be done on sunny days to control weeds/ insect-pest. Maintain proper drainage system to avoid water logging. Mature cobs may be harvested.
Soybean	Sowing to vegetative		 Maintain proper drainage system to avoid water logging If not sown early, sowing must be done during July.
			 Keep the plot clean to avoid hairy caterpillars. Hand weeding should be done before 30-35 days after sowing. For control of red hairy caterpillars in crops at vegetative stage, dust 5%
			Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water)
Storage (seed)			> Dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in godowns.
Horticulture Crops		1	
Turmeric/ Ginger	Vegetative to rhizome formation	Leaf spot disease	➤ Spray Redomil MZ-72 WP @ 2g/lit of water alternatively with Carbendazim @ 2g/ lit of water at 14 days interval.
		Rhizome rot	To prevent rhizome rot spray Redomil MZ 72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
			For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
Bhindi	Fruiting to harvesting	Jassids	➤ Infested leaf curl upward in margin. If small young nymphs of different colours are found on the underside of the leaves, spray Monocrotophos 36EC @ 1 ml / lit of water after harvesting the mature fruits.



Manipur Centre, Lamphelpat, Imphal - 795 004







Turmeric/ Coria	nder	Intercro	pping			 Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. High density sowing at a spacing of 5 cm x 10 cm may also be done. 		
Cowpea	Sowing Sowing				 Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. Recommended varieties: Yard long bean & Pusa Barsati. 			
Cucurbits (Water melon, pumpking gourd, etc.)		Vegetat	ive/harvest			 Avoid water stagnation in the root zone, harvest the mature ones. Avoid the fruits to touch the ground by staking or with the support of dried twigs. 		
Passion Fruit		Floweri	ng to	Fruit rot		- Spray Metalxyl + Mancozeb @ 2 g/litr water at 7 days interval		
		fruiting		Fruit fly		- Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ha.		
				Brown Sp	ot	- Remove the infected leaves and burn. Spray Zineb @ 2 mg/ltr water.		
				Termite		- Apply Chloropyriphos 10%G @ 25 kg/ha into the soil.		
				Collar rot		- Drench the soil of collar region with 1% Bordeaux mixture		
Animal Science Name of the animal	Growtl	h stage	Disease/ in	festation		Agro-meteorological advisories		
	ls to graze	e in fodder	fields now, as	at the time	of sudden	growth in fodder after long submergence presence of cyanide has been found.		
Poultry (Chicken/ Turkey/ Duck)	All age		Care & man		Do seasUse	not give muddy water as there is chance of colibacillosis during the rainy		
			Coccidiosis			 Use Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be associated. Use Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with 		
			Deworming	half the dose.				
Sheep/ Goat	All age groups excepts the young ones		Care & management		prol ➤ Giv ➤ Use ➤ 21 c	the policy the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture blem e multivitamins @15ml orally quality disinfectants for disinfecting the surrounding of the sheds. days after shearing sheep, their bodies should be drenched with Butox @ 2ml/vater. Use medicated water for drenching.		
			De-worming			worming of animals should be done using Abendazole/Levamisole @7.5 kg b.wt. or Ivermectin @50mg/kg b. wl.		
Pig	except the young ones Mi En Dia		Care and ma	nnagement	MirTres	neral mixture be added in feed @10-20 g/adult animal. at drinking water with potassium permanganate/ sanitizer. vide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds		
			Mites infestation Enteric disease Diarrhoea & Dysentry		UsePro:	ay with Skin Heal Spray in sufficient quantity. Livocin @ 7.5 mg per kg b.wt. 3-5 days. mpt treatment with Antibiotics Sulpha drugs.		
Cattle	excepts	Deworming All age groups xcepts the roung ones			➤ If th	e Piperazine liquid @ 10-15ml orally once only. ne animals have not yet been vaccinated, give vaccine, now for Black Quarter, nemorrhagic septicaemia, Foot & Mouth Disease, Enterotoxaemia etc.		
	joung ones		Endoparas Care & man			worm orally once using Nilzan-F @ 90ml/ 300 kg body weight. ne animals do not have access to green fodders, vitamin E injection/		
				sup ➤ Foo ➤ Do ➤ After two ➤ Giv	plements should be given. d supplements may be given @20-30 gm/animals. not let animals graze in irrigated fodder fields/meadows. er the birth of the self the new born must be fed with Colostrum within the first hours. e Calmore Forte @100ml orally once daily.			
			Milk Fever			tect from milk fever by giving daily a mixture of calcium and phosphorus @ 100ml.		



Manipur Centre, Lamphelpat, Imphal - 795 004





Fishery:			
Type of Farming	Stage	Management	Agro-metrological advisories
Carp culture	Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish. Encircle the pond with net or bamboo mat as a preventive measure for flood.
		Feed	Fish feed should be provided @ 10-15 % body weight per day.
		Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
	Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
	Feed	 Sampling of fish for growth, disease (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended 	
		Fish	 Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	Water depth of the field can be increase by pumping or draining if water is available to continue the culture.
			 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches. 1000-3000 fish fingerlings can be stocked in 1 hectare rice field.
Integrated Fish Farming	Pig		 Feeding should be done @ 2% body weigh5t per day. About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is
	Duck		provided once a week to avoid mineral deficiency. > 200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.



Manipur Centre, Lamphelpat, Imphal - 795 004

"Gramin Krishi Mausam Seva"



MANIPUR BULLETIN 22nd July, 2016

Senapati

IAAS, ICAR-RC Manipur Centre in association with India Meteorological Department, Regional Meteorological Centre, Guwahati and Northern Hemisphere Analysis Centre, New Delhi, Ministry of Earth Science, Govt. of India reports the weather forecasts for the next five days, i.e., from 23rd to 27th July, 2016 as below:

Significant past weather for the preceding bi-weekly of Imphal - West (19th to 21st July, 2016)

The sky remained mainly cloudy to overcast and rainfall of 6.4 mm was recorded during past three days. Maximum temperature range observed was 28.0 to 31.2 $^{\circ}$ C, range of minimum temperature observed was 22.1 to 22.4 $^{\circ}$ C, mean relative humidity observed in morning and afternoon were 87.33 % and 71.33 % respectively. The average wind speed range was 3.1 to 5.9 km/hr.

Weather forecast for next five days of Senapati $(23^{rd}\ to\ 27^{th}\ July,\ 2016)$

Likely to have light rain and heavy rain at isolated places. Sky will remain mainly cloudy to overcast, with maximum temp. 27 - 29 $^{\circ}$ C & minimum temp. 19 - 21 $^{\circ}$ C. Relative humidity may reach upto 99 % (max RH) & 96 % (min RH). The average wind speed may be 0 - 2 km/hr. Wind direction may be Westerly to North - Westerly during the next five days.

Weather Outlook for subsequent 2 days from 27th July to 29th July 2016 Rainfall at many places very likely over northeastern states Weather warning for next five days *

Name of the crop	Stage	Pest and disease	Agro-meteorological advisories
Field Crops			
Main kharif rice	Transplanting to Establishment		➤ In replanting flooding fields, prepare rice nurseries in raised beds with RC- Maniphou 7.
			 During final leveling apply fertilizer @ 65kg Urea, 250 kg SSP and 33kg MOP as basal dose before transplanting seedlings. Uproot 25-35 days old seedlings. About 1200-1300 bundles of seedlings (40cm diameter) are required for transplanting in one hectare area. Row planting of 2-3 seedlings per hill may be done at 25x10cm using beaded rope. Maintain a thin film of water upto 7 days after transplanting. Release
			excess water if accumulated due to rain. > Thinning may be done in rice fields where plant population is high and
			replant in area where plants have died due to flood.
		Thrips & Leaf folder	➤ Spray Lambdacyhothrin 5% EC @ 15 ml/ 15 lit of water.
Kharif maize	Cob formation to maturity		 Weeding may be done on sunny days to control weeds/ insect-pest. Maintain proper drainage system to avoid water logging. Mature cobs may be harvested.
Soybean	Sowing to vegetative		 Maintain proper drainage system to avoid water logging If not sown early, sowing must be done during July.
			 Keep the plot clean to avoid hairy caterpillars. Hand weeding should be done before 30-35 days after sowing. For control of red hairy caterpillars in crops at vegetative stage, dust 5%
			Malathion @ 20 kg/ ha to control it or spray Dichlorovos 7.6 EC 0.05% (0.6ml/ lit of water)
Storage (seed)			> Dry, clean and store the seeds in RC-seed bins after proper drying of seeds along with charcoal. Check for moisture content or weight of seeds. After proper drying, store grains in well ventilated godowns. Spray Malathion 1% in godowns.
Horticulture Crops		1	
Turmeric/ Ginger	Vegetative to rhizome formation	Leaf spot disease	> Spray Redomil MZ-72 WP @ 2g/lit of water alternatively with Carbendazim @ 2g/ lit of water at 14 days interval.
		Rhizome rot	To prevent rhizome rot spray Redomil MZ 72 W.P. @ 2 g/ lit of water at 15 days interval for 2-3 times.
			For grown up plants spray Dithan M45 @ 2 to 2.5 ml/lit of water as prophylactic measures after the rain.
Bhindi	Fruiting to harvesting	Jassids	➤ Infested leaf curl upward in margin. If small young nymphs of different colours are found on the underside of the leaves, spray Monocrotophos 36EC @ 1 ml / lit of water after harvesting the mature fruits.



Manipur Centre, Lamphelpat, Imphal - 795 004





Cowpea Sowing		Intercro	pping			 Coriander variety Green Wonder or local one may be sown as intercrop plants in Turmeric field. High density sowing at a spacing of 5 cm x 10 cm may also be done.
					 Cowpea may be sown as an intercrop in the fruit orchard such as lemon, orange, passion fruit, etc. Land preparation; sowing spacing: 45 – 60 cm from seed to seed and row to row; raised beds are preferred for sowing. Recommended varieties: Yard long bean & Pusa Barsati. 	
		ive/harvest			 Avoid water stagnation in the root zone, harvest the mature ones. Avoid the fruits to touch the ground by staking or with the support of dried twigs. 	
Passion Fruit Flowe		Floweri	ng to	Fruit rot		- Spray Metalxyl + Mancozeb @ 2 g/litr water at 7 days interval
		fruiting		Fruit fly Brown Spot Termite		- Apply poison baiting with Jaggary + fruit juice + Malathion (20:20:1) @ 40-50 baits/ha.
						- Remove the infected leaves and burn. Spray Zineb @ 2 mg/ltr water.
						- Apply Chloropyriphos 10%G @ 25 kg/ha into the soil.
		<u> </u>		Collar rot		- Drench the soil of collar region with 1% Bordeaux mixture
Animal Sciences Name of the animal Growth stage		Disease/ infestation		Agro-meteorological advisories		
	ls to graze	in fodder	fields now, as	at the time	of sudden	growth in fodder after long submergence presence of cyanide has been found.
Poultry (Chicken/ Turkey/ Duck) All age groups		groups	Care & man	agement	sease > Use	on the give muddy water as there is chance of <i>colibacillosis</i> during the rainy on. water sanitizer in drinking water/potassium per magnate (few grains) on the litter dry & add 2 kg lime powder for 100 sq. ft. area and mix it properly.
		Coccidiosis			> Use asso	Amprolium @1.5g/ltr of drinking water for 5-7 days and electrolyte can be ciated. Albendazole liquid @ 20-40 ml for 100 adult birds and repeat it next day with
		0401180	Deworming Care & management		half	the dose.
Sheep/ Goat All age excepts young of		the		agement	prob Give Use 21 d	the animals on the platform if possible to avoid <i>Pneumonia</i> due to moisture lem multivitamins @15ml orally quality disinfectants for disinfecting the surrounding of the sheds. as a sfter shearing sheep, their bodies should be drenched with Butox @ 2ml/ater. Use medicated water for drenching.
			De-worming	5	➤ De-v	vorming of animals should be done using Abendazole/Levamisole @7.5 g b.wt. or Ivermectin @50mg/kg b. wl.
Pig All age g except the young or		he	Care and managen		> Trea	eral mixture be added in feed @10-20 g/adult animal. t drinking water with potassium permanganate/ sanitizer. ide ample ventilation in the shed/ dry bedding. Avoid dampness in sheds
	, ,		Mites infest Enteric dise Diarrhoea &	ase Dysentry	UsePron	y with Skin Heal Spray in sufficient quantity. Livocin @ 7.5 mg per kg b.wt. 3-5 days. npt treatment with Antibiotics Sulpha drugs.
excepts	All age excepts	the			➤ If the	Piperazine liquid @ 10-15ml orally once only. e animals have not yet been vaccinated, give vaccine, now for Black Quarter, morrhagic septicaemia, Foot & Mouth Disease, Enterotoxaemia etc.
	young o	nes	Endoparas: Care & man		> If the supp > Food > Do r > Afte two > Give	worm orally once using Nilzan-F @ 90ml/ 300 kg body weight. e animals do not have access to green fodders, vitamin E injection/ elements should be given. I supplements may be given @20-30 gm/animals. Not let animals graze in irrigated fodder fields/meadows. In the birth of the self the new born must be fed with Colostrum within the first thours. I calmore Forte @100ml orally once daily.
			Milk Fever			ect from milk fever by giving daily a mixture of calcium and phosphorus @ 00ml.



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Type of	Stage	Management	Agro-metrological advisories
Farming	Stage	Management	Agro-men ological auvisories
Carp culture	Fish nurseries	Pond and water	 Water depth should be maintain at 1.0-1.5m Agri-lime should be applied in ponds Ponds should be free from aquatic weed, predatory insects and fish. Encircle the pond with net or bamboo mat as a preventive measure for flood.
		Feed	Fish feed should be provided @ 10-15 % body weight per day.
		Fish	 About 5 million feeding fries are stocked per 1 ha for pre-nursing pond Duration is 25-45 days.
	Grow out	Pond and water	 Water depth should be maintain at 1.5-2.0m Regular liming should be done @ 30-35 kg/ha at 30 days interval
		Feed	 Sampling of fish for growth, disease (if any) should be done by regular netting. Partial harvesting of marketable size fishes are also recommended
		Fish	 Feed should be provided @ 3-5 % body weight per day Feed can be fed at 2 times a day.
	Paddy cum fish culture	water	 Water depth of the field can be increase by pumping or draining if water is available to continue the culture. 20-40% of the paddy plot can be made as 1.0-1.5m depth trenches. 1000-3000 fish fingerlings can be stocked in 1 hectare rice field. Feeding should be done @ 2% body weigh5t per day.
Integrated Fish Farming	Pig		➤ About 30-40 two months old pigs may be kept for proper fertilization of the one ha pond. Pigs are feed on mash at an average of 1kg/day. Green grasses or animal folder is also provided. Grass with interlocked soil in the root system (sod) is provided once a week to avoid mineral deficiency.
	Duck		➤ 200-400 ducks of 2-3 months old are sufficient to adequately fertilize a 1 ha pond.