

STATE COMPOSITE AGRO-MET ADVISORY BULLETIN FOR THE STATE OF SIKKIM



PERIOD: 06TH NOVEMBER to 09TH NOVEMBER'2015

IMD, GANGTOK IN COLLABORATION WITH ICAR, GANGTOK, FSAD AND HCCD, GANGTOK





ISSUED ON FRIDAY 06TH NOVEMBER'2015

Meteorological Sub-division of Sikkim

As per India Meteorological Department's classification, Sikkim is a part of Met Sub-Division of Sub Himalayan West Bengal & Sikkim (SHWB & SKM) and is divided into four (4) Districts:

- 1) North District with HQ at Mangan
- 2) East District with HQ at Gangtok
- 3) West District with HQ at Gyalsing
- 4) South District with HQ at Namchi

Mangan (PTO)			North Sikkim Forecast						
			Day → Parameter↓	Day 1	Day 2	Day 3	Day 4	Day 5	
Date	Rainfall	Max. Temp	Min. Temp Sky Condition		Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
Date	(mm)	(°C)	(°C)	Rainfall	Very Light	No rain	No rain	No rain	No rain
3/11/2015	000	20.2	16.2	Wind (Km/Hr) (Speed/ Dir)	3(SW)	2(SW)	3(SW)	3(SW)	3(SW)
4/11/2015	043	17.0	12.3	Temperature (Min-Max)	11 - 17°C	11 - 18°C	10 - 18°C	10 - 19°C	10 - 19°C
5/11/2015	008	17.2	10.3	RH (Min- Max)	62 - 80%	62 - 80%	60 - 76%	58 - 74%	58 - 72%

Constal			East Sikkim Forecast						
	Gangtok			Day → Parameter↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	Rainfall	Max. Temp Mi	Min. Temp (°C)	Sky Condition	Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
Date	(mm)			Rainfall	Light	No rain	No rain	No rain	No rain
3/11/2015	000	15.6	13.4	Wind (Km/Hr) (Speed/ Dir)	3(W)	2(WNW)	4(WNW)	3(W)	2(WNW)
4/11/2015	035	14.8	13.2	Temperature (Min-Max)	11 - 15°C	11 - 15°C	11 - 16°C	10 - 16°C	10 - 16°C
5/11/2015	006	13.9	11.7	RH (Min- Max)	82 - 94%	82 - 92%	76 - 91%	74 - 90%	72 - 89%

Namethorn		South Sikkim Forecast							
	Namthang			Day → Parameter↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	Rainfall	*	Min. Temp	Sky Condition	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
Date	(mm)		(°C)	Rainfall	Light	No rain	No rain	No rain	No rain
3/11/2015	002	20.5	16.0	Wind (Km/Hr) (Speed/ Dir)	3(W)	2(W)	3(W)	3(W)	2(W)
4/11/2015	001	22.0	15.0	Temperature (Min-Max)	13 - 21°C	13 - 21°C	13 - 22°C	13 - 22°C	13 - 22°C
5/11/2015	002	21.0	13.5	RH (Min- Max)	60 - 80%	60 - 80%	56 - 74%	54 - 72%	54 - 72%

Creatabing (AMC)			West Sikkim Forecast						
	Gyalshing (AWS)			Day → Parameter↓	Day 1	Day 2	Day 3	Day 4	Day 5
Date	Rainfall	Max. Temp	Min. Temp	Sky Condition	Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy	Generally Cloudy
Date	(mm)	(°C)	(°C)	Rainfall	Very Light	No rain	No rain	No rain	No rain
3/11/2015	N/A	N/A	N/A	Wind (Km/Hr) (Speed/ Dir)	3(WSW)	3(WSW)	3(WSW)	2(WSW)	2(W)
4/11/2015	N/A	N/A	N/A	Temperature (Min-Max)	12 - 16°C	12 - 16°C	12 - 17°C	12 - 17°C	12 - 17°C
5/11/2015	N/A	17.5	N/A	RH (Min- Max)	80 - 92%	78 - 90%	74 - 88%	70 - 82%	70 - 80%

Part II

AGRO-METEREOLOGICAL ADVISORIES

General Advisories for all the crops/ livestock

- Preventive spray and soil drenching with copper oxychloride @2.5 g/l of water at 7-10 days intervals.
- Spraying of plant protection biopesticides on bright sunny day.
- Nursery should be raised for cole crops (cabbage, cauliflower, broccoli), raya saag etc.
- Mulching should be done through locally available biomass to conserve soil moisture for rabi crops.
- Jalkund should be covered with thatch to prevent evaporation losses.
- Avoid feeding of damp and foul smelling feed to all livestock and poultry.
- De-worming with Fenbendazole @ 10 mg / kg body weight.

Name of the crop/Animal	Stage	Pest/ Disease	Agro-Met Advisories
Crops			
Rice	Grain filling/ Harvesting	Neck blast Gundhi bug	 Spray neem based formulation (1500ppm) @ 3ml per litre of water for controlling rice gundhi bug. Proper soil moisture should be maintained up to grain filling stage. Spray with copper oxychloride @ 0.25 % or Bordeaux mixture @ 1% for the management of neck blast at 10-15 days interval. Birds scaring ribbon should be used for scaring the birds. Harvesting should be done 15 cm above the ground for moisture conservation and no till pea and mustard/ toria sowing.
Rice bean	Pod formation	Blister Beetle	 Proper staking should be done. Collection and destruction of Blister beetles and legume pod borer and spraying of Neem oil @3ml/lit should be done.

Black gram	Pod formation/	Legume pod borer Blister Beetle	Collection and destruction of Blister
	Harvesting		beetles and spraying of Neem oil @3ml/lit should be done. Harvesting should be done when pod turns pale yellow colour.
Finger Millet	Grain formation/ Harvesting		Regular field monitoring should be done.
Buckwheat	Sowing		 After field preparation FYM @ 2t/ha and vermicompost @ 1t/ ha should be applied. Sowing should be done in line at the spacing of 30x10cm.
Mustard/ Toria	Sowing		 After field preparation FYM @ 2t/ha and vermicompost @ 1t/ ha should be applied. Sowing should be done in line at the spacing of 30x10cm. Alternatively, sowing can also be done immediately after harvesting of rice under no till condition in between the rows (zero till).
Vegetable pea/ Field pea	Sowing	No till pea	 Apply FYM @ 2t/ha and vermicompost @ 1t/ ha before sowing. Sowing should be done in line at the spacing of 30-40x10cm. Soil moisture should be maintained for proper germination. Alternatively, sowing can also be done immediately after harvesting of rice under no till condition in between the rows (zero till).
Tomato	Flowering/ Fruiting		Removal of infected leaves/ plant and drenching/ spray with copper oxychloride @ 0.25 % or Bordeaux mixture @ 1%.

	Nursery sowing	Late Blight	•	Harvesting of mature green tomato should be done for distant market and pinkish/ reddish for local market. Seed should be sown in moist soil in raised nursery bed of size 1x5m under protected condition at 3-4 cm spacing. FYM @ 2kg/ sqm, neem cake @ 200g/sqm, Trichoderma @2% should be incorporated in soil before sowing seed. Regular watering in nursery is recommended.
Winter vegetables	Nursery/ Transplanting		•	Transplanting should be done in small pits filled with well decomposed FYM @ 2-2.5 kg/sqm., neem cake @ 200g/sqm. and <i>Trichoderma</i> @1-2 g/sqm should be mixed in soil before transplanting. Nursery can be raised for early winter vegetables like cabbage, cauliflower, broccoli, raya saag etc. Seed should be sown in moist soil in raised nursery bed of size 1x5m under protected condition. FYM @ 2kg/ sqm, neem cake @ 200g/sqm, Trichoderma @2% should be incorporated in soil before sowing seed. Regular watering in nursery is recommended.
Dalley chilli/ Red Cherry pepper	Harvesting	Fruit fly	*	Collection and destruction of infested dropped fruits. Regular harvesting should be done to improve the yield.
Large cardamom	After harvesting			Removal and burying of blight infected leaves. Weeding/ removal of infected tillers should be done. Regular watering should be done at 10-15 days intervals. Regular monitoring for pest and disease incidence.

			\limits	Shade management with the proper
				lopping.
Ginger	Harvesting			Identify healthy plants for seed
	Seed			rhizomes.
				Care should be taken during
				harvesting to avoid the mechanical
				injury in the rhizome.
Sikkim	Fruit maturity/	Fruit drop	\limits	Collection of infected dropped fruit
Mandarin		and the second		and buried in to soil.
	Harvesting			Regular monitoring for trunk borer
				infestation.
				Harvesting should be done along with
				twig with two leaves.
			\line{\pi}	Diseased and senile branches should
			ľ	be removed.
				oc removed.
Animal Scien	aces			
Tibetan Sheep	Production stage		\line{\pi}	Feeding of concentrate feed along
_				with mineral mixture and salt.
Yak	Production stage		\line{\pi}	Feeding of concentrate feed along
	C			with mineral mixture and salt.
Cattle, Sheep	All stages		\limits	Chances of coming into estrus so
and Goat				farmers are advised to look for heat
				sign especially during early morning
				or late evening and ensure breeding
				of the animal after 12 hr of 1st heat
				observe.
			\limits	Feeding of concentrate feed along
				with jaggery, mineral mixture and
				salt.
			\lambda	Periodic application of fly repellents
				and/ or netting of dung pit is
				recommended.
Cattle	Periparturient			Balanced feeding of dairy animals
Cattle	1 oripartarient		Ť	and allow calf suckling immediately
				after parturition.
				Full hand milking should be
			~	practiced.
				•
			~	
				interval of 4hrs should be practiced
D14	A 11 - 4 -	C		after parturition for minimum 1 week.
Poultry	All stages	Cocciodiosis	*	16 hrs of light (natural and electrical)
				should be provided to adult birds for
				optimum egg production.
			*	Frequent raking and liming of deep

	Γ	T	1	
				litter materials.
				Inclusion of turmeric powder @
				10g/kg feed for prevention of
				cocciodiosis.
			*	Maintenance of brooder temperature
				for chicks with the help of electrical
				bulbs for initial one month.
				Ranikhet vaccination at 5 th day and at
				30 th day of age.
				Calcium and multi vitamin
				supplementation is strongly
				recommended to optimize egg
				production.
				Spraying of ectoparasiticidal @ 1%
				deltamethrin/ cypermethrin.
Pig	All stages	Swine fever	\limits	Keep floor dry to avoid skin diseases.
				Swine fever vaccine at the age of 8-
				10 week is recommended.
				Critical heat detection in early
				morning and late evening is
				recommended.
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			-	Feed 5-10% green fodder of their
				diet.

Agro-Met Advisory member of ICAR, Sikkim Centre

Name	Designation	Department
1. Dr. R. K. Avasthe	Joint Director	Soil Science
2. Dr. Homeswar Kalita	Principal Scientist	Entomology
3. Dr. Ashish Yadav	Senior Scientist	Horticulture
4. Dr. Raghavendra Singh	Senior Scientist	Agronomy
5. Dr. Matber Singh	Scientist, SS	Agroforestry
6. Dr. R. Gopi	Scientist, SS	Plant Pathology
7. Dr. Subhash Babu	Scientist	Agronomy
8. Mr. Shaon Kr Das	Scientist	Agril. Chemistry/ Soil Sc.
9. Dr. Brijesh Kumar	Scientist	Animal Reproduction
10. Dr. Mahak Singh	Scientist	Animal Reproduction
11. Mr. Boniface Lepcha	Subject Matter Specialist	Horticulture

Ms. Pallabi Phukan (Subject Matter Specialist - Agril. Extn) Nodal Officer