Integrated Agromet Advisory Service Bulletin from 6th to 10th June '18
Dimapur District

Bulletin No:45/2018

ICAR RESEARCH COMPLEX FOR NEH REGION
(Indian Council of Agricultural Research)
NAGALAND CENTER, JHARNAPANI. MEDZIPHEMA

Weather summary of the preceding week	*Weather forecast valid upto 10th June 2018*
▪ Moderate rain occurred the past week ▪ Maximum and minimum temperatures ranged 32^0C to 33^0C and 21^0C to 23^0C, respectively. ▪ Relative humidity varied from 32% to 90%. ▪ Wind speed ranged from 2 to 3 kmph	▪ Probability of moderate rain the coming week. ▪ **Max temp** is likely to be 34^0C - 33^0C and the **min temp** 23^0C to 24^0C ▪ **Sky is likely to be partly cloudy** the coming week ▪ **Relative Humidity** is likely to range from 31% to 85%. ▪ **Wind speed** may reach upto 2- 3 kmph **Wind direction** will be mostly southeasterly

- Locally available nutrient resources should always be preferred along with the external nutrient inputs to make the farming system more sustainable.
- Neem products should be incorporated as they are non-toxic and are a safe alternative to commercially manufactured chemical fertilisers. Spraying should be undertaken in the morning or late in the afternoon. Insects lay eggs on the underside of the leaves. Hence it is important to spray on the underside of the leaves as well.
- Low cost rain water harvesting structure (Jalkund) should be incorporated as it provides irrigation in lean season and provides healthy food. It also increases the production and productivity of high value vegetables crops and generates additional net monetary income of the farmer.

Field crops

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
Jhum Paddy	Vegetative stage	-	*High humidity favour the disease incidence. It is a severe fungal disease. Typical spindle shaped leaf lesions, wide at centre and pointed toward either end are seen. In severe cases they coalesce and the leaves die. Neck and panicle infection causes chaffy and shriveled grains.* *Maintain rice fields free from weeds which give shelter to many pathogens*
Paddy	Storage		• *Place sticky traps in the drying and storage areas for rats.* • *Storage rooms should be physically rodent and bird proof, if possible.* • *Inspect the stored seeds once a week for signs of insect infestation.*
Green gram	Flowering stage	-	*Clean cultivation should be maintained. Proper earthing up should be done*
Maize	Tasseling stage		*Timely weeding and earthing up should be done so as to prevent the plants from lodging*

Horticultural crop

- For disease management proper drainage and raised beds are a must for management of nursery diseases, formulations

Trichoderma harzianum and *T. viridae* can be used for seed and soil treatment as well as foliar application against the fungal pathogens, Crop rotation should be followed for starving the pathogens and declining their population, One percent Bordeaux mixture can be applied as root dip, soil drench and foliar spray, bordeaux paint applied on the trunk and pruned wounds of citrus prevent pathogens attack

- Banana crop is infested by a number of pest and disease. Disease can be controlled with frequent applications of fungicides, certifying seed, and cultural practices, such as practise of good hygiene, avoid large areas of any one variety of crop, especially in high disease areas, regular monitor of crops for diseases and resistance, and adequate spacing of plants and efficient drainage within plantation

Khasi Mandarin	New flush		*Proper monitoring should be done for trunk borers. Collect and destroy them wherever feasible and inject petrol or nuvan into the holes and plug the holes with mud.*
Cucurbits	Vegetative to flowering stage	Red pumpkin beetle	*Monitor the plants against **red pumpkin beetle** in cucurbits especially bottle gourd, pumpkin, cucumber, water melon etc. Adults are small, elongated yellow and defoliate the leaves immediately after germination. Larvae feed on roots and plant parts. Mechanically collect and destroy the pest if incidence is low.*
Okra	Fruiting stage	Fruit and shoot borer	*Collect and destroy all the infested fruits.* *Timely earthing up should be done*
Brinjal	Ratoon crop	Shoot and fruit borer	*Incidence of **Shoot and fruit borer** usually occurs during humid conditions after the rainfall. Small brown caterpillars bore into the top tender shoots and tunnel downwards the main axis which wither, droop down and growing points are killed and later on they bore into the fruits and feed within. Affected fruits become unfit for consumption. Infested fruits and shoots should be removed regularly and buried deep in the soil.*
Ginger / turmeric	Vegetative stage	Rhizome rot	*The plot should be well drained free from water logging and while planting healthy rhizomes should be used for cultivation so as to prevent rhizome rot.* *Maintain proper drainage in the field of ginger to prevent diseases. The field must be inspected regularly for disease appearance and more often when it rains.*

Livestock

- Water stagnation should be avoided in livestock shed to avoid mosquito breeding

Poultry	• Shades from tall trees and plantation around the sheds can reduce the radiant heat. The plantation of trees should be such that trees will be leafy during summer and bald during winter • Thatching of roof with paddy straw or sugar cane leaves will reduce temperature inside the shed • For day old chicks provide cool water and electrolytes on their arrival to farm before offering feed to avoid dehydration after transportation • Shifting, transportation, de-beaking and vaccination should be done during night or cool hours of the day
Piggery	• Identify and isolate the infected and in contact animals • Dispose the dead animals either by burning or deep burial • Regular disinfection of shed and its premises with 1-2 % phenyl • Regular de-worming to control internal parasites

		• Keep the animal house clean and dry
	Fisheries	
		• By this month, renovation of old pond and excavation of new pond should be completed. • Proper inspection of work should be done for new pond • Adopt culture practice as per the technical advice If the management measures are followed accordingly, a good harvest can be expected. It is advisable to consult a fisheries expert prior to taking any management measures

SCIENTIFIC EXPERT COMMITTEE

Sl.no	Name	Designation	Department	
1	Dr.D.J. Rajkhowa	Principle Scientist	Agronomy	djrajkhowa@gmail.com
2	Dr. L.K. Baishya	Senior Scientist	Agronomy	lkbicar@gmail.com
3	Ph. Romen Sharma	Scientist	Agricultural Extension	romen.agext@gmail.com
4	Dr. Rajesha G	Scientist	Plant Pathology	rajeshag337@gmail.com
5	Dr. Mahak Singh	Scientist	Animal Reproduction & Gynaecology	mahaksinghivri@gmail.com
6	Dr. Azeze Seyie	Scientist	Spices, Plantation & Medicinal & Aromatic Plants	azezeseyie@yahoo.com
7	Jyotish Barman	Scientist	Fisheries Resource Management	jyotish5@gmail.com
8	Aabon W Yanthan	Scientist	Vegetable Science	aabon.iari@gmail.com

Integrated Agromet Advisory Service Bulletin from 6th to 10th June '18
Kiphire District

Bulletin No:45/2018

ICAR RESEARCH COMPLEX FOR NEH REGION
(Indian Council of Agricultural Research)
NAGALAND CENTER, JHARNAPANI. MEDZIPHEMA

Weather summary of the preceding week	*Weather forecast valid upto 10th June 2018*
▪ Moderate rain occurred the past week ▪ Maximum and minimum temperatures ranged 27^0C to 28^0C and 17^0C to 19^0C, respectively. ▪ Relative humidity varied from 53% to 92%. ▪ Wind speed ranged from 3 to 4 kmph	▪ Probability of moderate rain the coming week. ▪ **Max temp** is likely to be 28^0C - 29^0C and the **min temp** 19^0C to 20^0C ▪ **Sky is likely to be mainly cloudy** the coming week ▪ **Relative Humidity** is likely to range from 44% to 95%. ▪ **Wind speed** may reach upto 1-2 kmph **Wind direction** will be mostly southeasterly

- Locally available nutrient resources should always be preferred along with the external nutrient inputs to make the farming system more sustainable.
- Neem products should be incorporated as they are non-toxic and are a safe alternative to commercially manufactured chemical fertilisers. Spraying should be undertaken in the morning or late in the afternoon. Insects lay eggs on the underside of the leaves. Hence it is important to spray on the underside of the leaves as well.
- Low cost rain water harvesting structure (Jalkund) should be incorporated as it provides irrigation in lean season and provides healthy food. It also increases the production and productivity of high value vegetables crops and generates additional net monetary income of the farmer.

Field crops

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
Jhum Paddy	Vegetative stage	-	*High humidity favour the disease incidence. It is a severe fungal disease. Typical spindle shaped leaf lesions, wide at centre and pointed toward either end are seen. In severe cases they coalesce and the leaves die. Neck and panicle infection causes chaffy and shriveled grains.* *Maintain rice fields free from weeds which give shelter to many pathogens*
Paddy	Storage		• *Place sticky traps in the drying and storage areas for rats.* • *Storage rooms should be physically rodent and bird proof, if possible.* • *Inspect the stored seeds once a week for signs of insect infestation.*
Green gram	Flowering stage	-	*Clean cultivation should be maintained. Proper earthing up should be done*
Maize	Tasseling stage		*Timely weeding and earthing up should be done so as to prevent the plants from lodging*

Horticultural crop

- For disease management proper drainage and raised beds are a must for management of nursery diseases, formulations

Trichoderma harzianum and *T. viridae* can be used for seed and soil treatment as well as foliar application against the fungal pathogens, Crop rotation should be followed for starving the pathogens and declining their population, One percent Bordeaux mixture can be applied as root dip, soil drench and foliar spray, bordeaux paint applied on the trunk and pruned wounds of citrus prevent pathogens attack

- Banana crop is infested by a number of pest and disease. Disease can be controlled with frequent applications of fungicides, certifying seed, and cultural practices, such as practise of good hygiene, avoid large areas of any one variety of crop, especially in high disease areas, regular monitor of crops for diseases and resistance, and adequate spacing of plants and efficient drainage within plantation

Khasi Mandarin	New flush		*Proper monitoring should be done for trunk borers. Collect and destroy them wherever feasible and inject petrol or nuvan into the holes and plug the holes with mud.*
Cucurbits	Vegetative to flowering stage	Red pumpkin beetle	*Monitor the plants against **red pumpkin beetle** in cucurbits especially bottle gourd, pumpkin, cucumber, water melon etc. Adults are small, elongated yellow and defoliate the leaves immediately after germination. Larvae feed on roots and plant parts. Mechanically collect and destroy the pest if incidence is low.*
Okra	Fruiting stage	Fruit and shoot borer	*Collect and destroy all the infested fruits.* *Timely earthing up should be done*
Brinjal	Ratoon crop	Shoot and fruit borer	*Incidence of **Shoot and fruit borer** usually occurs during humid conditions after the rainfall. Small brown caterpillars bore into the top tender shoots and tunnel downwards the main axis which wither, droop down and growing points are killed and later on they bore into the fruits and feed within. Affected fruits become unfit for consumption. Infested fruits and shoots should be removed regularly and buried deep in the soil.*
Ginger / turmeric	Vegetative stage	Rhizome rot	*The plot should be well drained free from water logging and while planting healthy rhizomes should be used for cultivation so as to prevent rhizome rot.* *Maintain proper drainage in the field of ginger to prevent diseases. The field must be inspected regularly for disease appearance and more often when it rains.*

Livestock

- Water stagnation should be avoided in livestock shed to avoid mosquito breeding

Poultry	• Shades from tall trees and plantation around the sheds can reduce the radiant heat. The plantation of trees should be such that trees will be leafy during summer and bald during winter • Thatching of roof with paddy straw or sugar cane leaves will reduce temperature inside the shed • For day old chicks provide cool water and electrolytes on their arrival to farm before offering feed to avoid dehydration after transportation • Shifting, transportation, de-beaking and vaccination should be done during night or cool hours of the day
Piggery	• Identify and isolate the infected and in contact animals • Dispose the dead animals either by burning or deep burial • Regular disinfection of shed and its premises with 1-2 % phenyl • Regular de-worming to control internal parasites

		• Keep the animal house clean and dry
	Fisheries	
		• By this month, renovation of old pond and excavation of new pond should be completed. • Proper inspection of work should be done for new pond • Adopt culture practice as per the technical advice If the management measures are followed accordingly, a good harvest can be expected. It is advisable to consult a fisheries expert prior to taking any management measures

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8	Aabon W Yanthan	Scientist	Vegetable Science	aabon.iari@gmail.com

Integrated Agromet Advisory Service Bulletin from 6th to 10th June '18
Kohima District

Bulletin No:45/2018

ICAR RESEARCH COMPLEX FOR NEH REGION
(Indian Council of Agricultural Research)
NAGALAND CENTER, JHARNAPANI. MEDZIPHEMA

Weather summary of the preceding week	*Weather forecast valid upto 10th June 2018*
▪ Moderate rain occurred the past week ▪ Maximum and minimum temperatures ranged 24 ^{0}C to 25^{0}C and 13^{0}C to 16^{0}C, respectively. ▪ Relative humidity varied from 34% to 95%. ▪ Wind speed ranged from 2 to 3 kmph	▪ Probability of heavy rain the coming week. ▪ **Max temp** is likely to be 24^{0}C - 25^{0}C and the **min temp** 14^{0}C to 15^{0}C ▪ **Sky is likely to be mainly cloudy** the coming week ▪ **Relative Humidity** is likely to range from 57% to 95%. ▪ **Wind speed** may reach upto 2-3 kmph **Wind direction** will be mostly southerly

- Locally available nutrient resources should always be preferred along with the external nutrient inputs to make the farming system more sustainable.
- Neem products should be incorporated as they are non-toxic and are a safe alternative to commercially manufactured chemical fertilisers. Spraying should be undertaken in the morning or late in the afternoon. Insects lay eggs on the underside of the leaves. Hence it is important to spray on the underside of the leaves as well.
- Low cost rain water harvesting structure (Jalkund) should be incorporated as it provides irrigation in lean season and provides healthy food. It also increases the production and productivity of high value vegetables crops and generates additional net monetary income of the farmer.

Field crops

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
Jhum Paddy	Vegetative stage	-	*High humidity favour the disease incidence. It is a severe fungal disease. Typical spindle shaped leaf lesions, wide at centre and pointed toward either end are seen. In severe cases they coalesce and the leaves die. Neck and panicle infection causes chaffy and shriveled grains.* *Maintain rice fields free from weeds which give shelter to many pathogens*
Paddy	Storage		• *Place sticky traps in the drying and storage areas for rats.* • *Storage rooms should be physically rodent and bird proof, if possible.* • *Inspect the stored seeds once a week for signs of insect infestation.*
Green gram	Flowering stage	-	*Clean cultivation should be maintained. Proper earthing up should be done*
Maize	Tasseling stage		*Timely weeding and earthing up should be done so as to prevent the plants from lodging*

Horticultural crop • For disease management proper drainage and raised beds are a must for management of nursery diseases, formulations *Trichoderma harzianum* and *T. viridae* can be used for seed and soil treatment as well as foliar application against the fungal pathogens, Crop rotation should be followed for starving the pathogens and declining their population, One percent Bordeaux mixture can be applied as root dip, soil drench and foliar spray, bordeaux paint applied on the trunk and pruned wounds of citrus prevent pathogens attack • Banana crop is infested by a number of pest and disease. Disease can be controlled with frequent applications of fungicides, certifying seed, and cultural practices, such as practise of good hygiene, avoid large areas of any one variety of crop, especially in high disease areas, regular monitor of crops for diseases and resistance, and adequate spacing of plants and efficient drainage within plantation			
Khasi Mandarin	New flush		*Proper monitoring should be done for trunk borers. Collect and destroy them wherever feasible and inject petrol or nuvan into the holes and plug the holes with mud.*
Cucurbits	Vegetative to flowering stage	Red pumpkin beetle	*Monitor the plants against **red pumpkin beetle** in cucurbits especially bottle gourd, pumpkin, cucumber, water melon etc. Adults are small, elongated yellow and defoliate the leaves immediately after germination. Larvae feed on roots and plant parts. Mechanically collect and destroy the pest if incidence is low.*
Okra	Fruiting stage	Fruit and shoot borer	*Collect and destroy all the infested fruits.* *Timely earthing up should be done*
Brinjal	Ratoon crop	Shoot and fruit borer	*Incidence of **Shoot and fruit borer** usually occurs during humid conditions after the rainfall. Small brown caterpillars bore into the top tender shoots and tunnel downwards the main axis which wither, droop down and growing points are killed and later on they bore into the fruits and feed within. Affected fruits become unfit for consumption. Infested fruits and shoots should be removed regularly and buried deep in the soil.*
Ginger / turmeric	Vegetative stage	Rhizome rot	*The plot should be well drained free from water logging and while planting healthy rhizomes should be used for cultivation so as to prevent rhizome rot.* *Maintain proper drainage in the field of ginger to prevent diseases. The field must be inspected regularly for disease appearance and more often when it rains.*
Khasi Mandarin		Leaf miner, aphids, mites, trunk	*Spray neem oil @5ml/litre water against leaf miner, aphids, mites. Shake the trees to collect adult trunk borer*

			borer	
	Livestock			
	• Water stagnation should be avoided in livestock shed to avoid mosquito breeding			
	Poultry	• Shades from tall trees and plantation around the sheds can reduce the radiant heat. The plantation of trees should be such that trees will be leafy during summer and bald during winter • Thatching of roof with paddy straw or sugar cane leaves will reduce temperature inside the shed • For day old chicks provide cool water and electrolytes on their arrival to farm before offering feed to avoid dehydration after transportation • Shifting, transportation, de-beaking and vaccination should be done during night or cool hours of the day		
	Piggery	• Identify and isolate the infected and in contact animals • Dispose the dead animals either by burning or deep burial • Regular disinfection of shed and its premises with 1-2 % phenyl • Regular de-worming to control internal parasites • Keep the animal house clean and dry		
	Fisheries			
		• By this month, renovation of old pond and excavation of new pond should be completed. • Proper inspection of work should be done for new pond • Adopt culture practice as per the technical advice If the management measures are followed accordingly, a good harvest can be expected. It is advisable to consult a fisheries expert prior to taking any management measures		

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Integrated Agromet Advisory Service Bulletin from 6th to 10th June '18
Longleng District

Bulletin No:45/2018

ICAR RESEARCH COMPLEX FOR NEH REGION
(Indian Council of Agricultural Research)
NAGALAND CENTER, JHARNAPANI. MEDZIPHEMA

Weather summary of the preceding week	*Weather forecast valid upto 10th June 2018*
▪ Light rain occurred the past week ▪ Maximum and minimum temperatures ranged 27^{0}C to 29^{0}C and 17^{0}C to 19^{0}C, respectively. ▪ Relative humidity varied from 43% to 90%. ▪ Wind speed ranged from 2 to 3 kmph	▪ Probability of moderate rain the coming week. ▪ **Max temp** is likely to be 28^{0}C - 29^{0}C and the **min temp** 19^{0}C to 20^{0}C ▪ **Sky is likely to be mainly cloudy** the coming week ▪ **Relative Humidity** is likely to range from 42% to 95%. ▪ **Wind speed** may reach upto 2- 3kmph **Wind direction** will be mostly southeasterly

- Locally available nutrient resources should always be preferred along with the external nutrient inputs to make the farming system more sustainable.
- Neem products should be incorporated as they are non-toxic and are a safe alternative to commercially manufactured chemical fertilisers. Spraying should be undertaken in the morning or late in the afternoon. Insects lay eggs on the underside of the leaves. Hence it is important to spray on the underside of the leaves as well.
- Low cost rain water harvesting structure (Jalkund) should be incorporated as it provides irrigation in lean season and provides healthy food. It also increases the production and productivity of high value vegetables crops and generates additional net monetary income of the farmer.

Field crops

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
Jhum Paddy	Vegetative stage	-	*High humidity favour the disease incidence. It is a severe fungal disease. Typical spindle shaped leaf lesions, wide at centre and pointed toward either end are seen. In severe cases they coalesce and the leaves die. Neck and panicle infection causes chaffy and shriveled grains. Maintain rice fields free from weeds which give shelter to many pathogens*
Paddy	Storage		• *Place sticky traps in the drying and storage areas for rats.* • *Storage rooms should be physically rodent and bird proof, if possible.* • *Inspect the stored seeds once a week for signs of insect infestation.*
Green gram	Flowering stage	-	*Clean cultivation should be maintained. Proper earthing up should be done*
Maize	Tasseling stage		*Timely weeding and earthing up should be done so as to prevent the plants from lodging*

Horticultural crop • For disease management proper drainage and raised beds are a must for management of nursery diseases, formulations *Trichoderma harzianum* and *T. viridae* can be used for seed and soil treatment as well as foliar application against the fungal pathogens, Crop rotation should be followed for starving the pathogens and declining their population, One percent Bordeaux mixture can be applied as root dip, soil drench and foliar spray, bordeaux paint applied on the trunk and pruned wounds of citrus prevent pathogens attack • Banana crop is infested by a number of pest and disease. Disease can be controlled with frequent applications of fungicides, certifying seed, and cultural practices, such as practise of good hygiene, avoid large areas of any one variety of crop, especially in high disease areas, regular monitor of crops for diseases and resistance, and adequate spacing of plants and efficient drainage within plantation			
Khasi Mandarin	New flush		*Proper monitoring should be done for trunk borers. Collect and destroy them wherever feasible and inject petrol or nuvan into the holes and plug the holes with mud.*
Cucurbits	Vegetative to flowering stage	Red pumpkin beetle	*Monitor the plants against **red pumpkin beetle** in cucurbits especially bottle gourd, pumpkin, cucumber, water melon etc. Adults are small, elongated yellow and defoliate the leaves immediately after germination. Larvae feed on roots and plant parts. Mechanically collect and destroy the pest if incidence is low.*
Okra	Fruiting stage	Fruit and shoot borer	*Collect and destroy all the infested fruits.* *Timely earthing up should be done*
Brinjal	Ratoon crop	Shoot and fruit borer	*Incidence of **Shoot and fruit borer** usually occurs during humid conditions after the rainfall. Small brown caterpillars bore into the top tender shoots and tunnel downwards the main axis which wither, droop down and growing points are killed and later on they bore into the fruits and feed within. Affected fruits become unfit for consumption. Infested fruits and shoots should be removed regularly and buried deep in the soil.*
Ginger / turmeric	Vegetative stage	Rhizome rot	*The plot should be well drained free from water logging and while planting healthy rhizomes should be used for cultivation so as to prevent rhizome rot.* *Maintain proper drainage in the field of ginger to prevent diseases. The field must be inspected regularly for disease appearance and more often when it rains.*
Livestock • Water stagnation should be avoided in livestock shed to avoid mosquito breeding			

	Poultry	• Shades from tall trees and plantation around the sheds can reduce the radiant heat. The plantation of trees should be such that trees will be leafy during summer and bald during winter • Thatching of roof with paddy straw or sugar cane leaves will reduce temperature inside the shed • For day old chicks provide cool water and electrolytes on their arrival to farm before offering feed to avoid dehydration after transportation • Shifting, transportation, de-beaking and vaccination should be done during night or cool hours of the day
	Piggery	• Identify and isolate the infected and in contact animals • Dispose the dead animals either by burning or deep burial • Regular disinfection of shed and its premises with 1-2 % phenyl • Regular de-worming to control internal parasites • Keep the animal house clean and dry
	Fisheries	
		• By this month, renovation of old pond and excavation of new pond should be completed. • Proper inspection of work should be done for new pond • Adopt culture practice as per the technical advice If the management measures are followed accordingly, a good harvest can be expected. It is advisable to consult a fisheries expert prior to taking any management measures

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Integrated Agromet Advisory Service Bulletin from 6th to 10th June '18
Mokokchung District

Bulletin No:45/2018

ICAR RESEARCH COMPLEX FOR NEH REGION
(Indian Council of Agricultural Research)
NAGALAND CENTER, JHARNAPANI,MEDZIPHEMA

Weather summary of the preceding week	*Weather forecast valid upto 10th June 2018*
▪ Moderate rain occurred the past week ▪ Maximum and minimum temperatures ranged 27^0C to 28^0C and 15^0C to 18^0C, respectively. ▪ Relative humidity varied from 29% to 93%. ▪ Wind speed ranged from 3 to 5 kmph	▪ Probability of moderate rain the coming week. ▪ **Max temp** is likely to be 28^0C - 29^0C and the **min temp** 19^0C to 20^0C ▪ **Sky is likely to be mainly cloudy** the coming week ▪ **Relative Humidity** is likely to range from 51% to 90%. ▪ **Wind speed** may reach upto 3 - 4 kmph **Wind direction** will be southeasterly

- Locally available nutrient resources should always be preferred along with the external nutrient inputs to make the farming system more sustainable.
- Neem products should be incorporated as they are non-toxic and are a safe alternative to commercially manufactured chemical fertilisers. Spraying should be undertaken in the morning or late in the afternoon. Insects lay eggs on the underside of the leaves. Hence it is important to spray on the underside of the leaves as well.
- Low cost rain water harvesting structure (Jalkund) should be incorporated as it provides irrigation in lean season and provides healthy food. It also increases the production and productivity of high value vegetables crops and generates additional net monetary income of the farmer.

Field crops

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
Jhum Paddy	Vegetative stage	-	*High humidity favour the disease incidence. It is a severe fungal disease. Typical spindle shaped leaf lesions, wide at centre and pointed toward either end are seen. In severe cases they coalesce and the leaves die. Neck and panicle infection causes chaffy and shriveled grains.* *Maintain rice fields free from weeds which give shelter to many pathogens*
Paddy	Storage		• *Place sticky traps in the drying and storage areas for rats.* • *Storage rooms should be physically rodent and bird proof, if possible.* • *Inspect the stored seeds once a week for signs of insect infestation.*
Green gram	Flowering stage	-	*Clean cultivation should be maintained. Proper earthing up should be done*
Maize	Tasseling stage		*Timely weeding and earthing up should be done so as to prevent the plants from lodging*

Horticultural crop

- For disease management proper drainage and raised beds are a must for management of nursery diseases, formulations *Trichoderma harzianum* and *T. viridae* can be used for seed and soil treatment as well as foliar application against the fungal

pathogens, Crop rotation should be followed for starving the pathogens and declining their population, One percent Bordeaux mixture can be applied as root dip, soil drench and foliar spray, bordeaux paint applied on the trunk and pruned wounds of citrus prevent pathogens attack • Banana crop is infested by a number of pest and disease. Disease can be controlled with frequent applications of fungicides, certifying seed, and cultural practices, such as practise of good hygiene, avoid large areas of any one variety of crop, especially in high disease areas, regular monitor of crops for diseases and resistance, and adequate spacing of plants and efficient drainage within plantation			
Khasi Mandarin	New flush		*Proper monitoring should be done for trunk borers. Collect and destroy them wherever feasible and inject petrol or nuvan into the holes and plug the holes with mud.*
Cucurbits	Vegetative to flowering stage	Red pumpkin beetle	*Monitor the plants against **red pumpkin beetle** in cucurbits especially bottle gourd, pumpkin, cucumber, water melon etc. Adults are small, elongated yellow and defoliate the leaves immediately after germination. Larvae feed on roots and plant parts. Mechanically collect and destroy the pest if incidence is low.*
Okra	Fruiting stage	Fruit and shoot borer	*Collect and destroy all the infested fruits.* *Timely earthing up should be done*
Brinjal	Ratoon crop	Shoot and fruit borer	*Incidence of **Shoot and fruit borer** usually occurs during humid conditions after the rainfall. Small brown caterpillars bore into the top tender shoots and tunnel downwards the main axis which wither, droop down and growing points are killed and later on they bore into the fruits and feed within. Affected fruits become unfit for consumption. Infested fruits and shoots should be removed regularly and buried deep in the soil.*
Ginger / turmeric	Vegetative stage	Rhizome rot	*The plot should be well drained free from water logging and while planting healthy rhizomes should be used for cultivation so as to prevent rhizome rot. Maintain proper drainage in the field of ginger to prevent diseases. The field must be inspected regularly for disease appearance and more often when it rains.*
Livestock • Water stagnation should be avoided in livestock shed to avoid mosquito breeding			
Poultry	• Shades from tall trees and plantation around the sheds can reduce the radiant heat. The plantation of trees should be such that trees will be leafy during summer and bald during winter • Thatching of roof with paddy straw or sugar cane leaves will reduce temperature inside the shed • For day old chicks provide cool water and electrolytes on their arrival to farm before offering feed to avoid dehydration after transportation • Shifting, transportation, de-beaking and vaccination should be done during night or cool hours of the day		
Piggery	• Identify and isolate the infected and in contact animals • Dispose the dead animals either by burning or deep burial • Regular disinfection of shed and its premises with 1-2 % phenyl • Regular de-worming to control internal parasites		

		• Keep the animal house clean and dry
	Fisheries	
		• By this month, renovation of old pond and excavation of new pond should be completed. • Proper inspection of work should be done for new pond • Adopt culture practice as per the technical advice If the management measures are followed accordingly, a good harvest can be expected. It is advisable to consult a fisheries expert prior to taking any management measures

SCIENTIFIC EXPERT COMMITTEE

Sl.no	Name	Designation	Department	
1	Dr.D.J. Rajkhowa	Principle Scientist	Agronomy	djrajkhowa@gmail.com
2	Dr. L.K. Baishya	Senior Scientist	Agronomy	lkbicar@gmail.com
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6	Dr. Azeze Seyie	Scientist	Spices, Plantation & Medicinal & Aromatic Plants	azezeseyie@yahoo.com
7	Jyotish Barman	Scientist	Fisheries Resource Management	jyotish5@gmail.com
8	Aabon W Yanthan	Scientist	Vegetable Science	aabon.iari@gmail.com

Integrated Agromet Advisory Service Bulletin from 6th to 10th June '18 Mon District

Bulletin No:45/2018

ICAR RESEARCH COMPLEX FOR NEH REGION
(Indian Council of Agricultural Research)
NAGALAND CENTER, JHARNAPANI,MEDZIPHEMA

Weather summary of the preceding week	*Weather forecast valid upto 10th June 2018*
▪ Moderate rain occurred the past week ▪ Maximum and minimum temperatures ranged 26^0C to 27^0C and 14^0C to 17^0C, respectively. ▪ Relative humidity varied from 65% to 90% ▪ Wind speed ranged from 3 to 4 kmph	▪ Probability of moderate rain the coming week. ▪ **Max temp** is likely to be 26^0C - 27^0C and the **min temp** 17^0C to 18^0C ▪ **Sky is likely to be mainly cloudy** the coming week ▪ **Relative Humidity** is likely to range from 48% to 93%. ▪ **Wind speed** may reach upto 2- 3 kmph **Wind direction** will be mostly southeasterly

- Locally available nutrient resources should always be preferred along with the external nutrient inputs to make the farming system more sustainable.
- Neem products should be incorporated as they are non-toxic and are a safe alternative to commercially manufactured chemical fertilisers. Spraying should be undertaken in the morning or late in the afternoon. Insects lay eggs on the underside of the leaves. Hence it is important to spray on the underside of the leaves as well.
- Low cost rain water harvesting structure (Jalkund) should be incorporated as it provides irrigation in lean season and provides healthy food. It also increases the production and productivity of high value vegetables crops and generates additional net monetary income of the farmer.

Field crops

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
Jhum Paddy	Vegetative stage	-	*High humidity favour the disease incidence. It is a severe fungal disease. Typical spindle shaped leaf lesions, wide at centre and pointed toward either end are seen. In severe cases they coalesce and the leaves die. Neck and panicle infection causes chaffy and shriveled grains.* *Maintain rice fields free from weeds which give shelter to many pathogens*
Paddy	Storage		• *Place sticky traps in the drying and storage areas for rats.* • *Storage rooms should be physically rodent and bird proof, if possible.* • *Inspect the stored seeds once a week for signs of insect infestation.*
Green gram	Flowering stage	-	*Clean cultivation should be maintained. Proper earthing up should be done*
Maize	Tasseling stage		*Timely weeding and earthing up should be done so as to prevent the plants from lodging*

Horticultural crop

- For disease management proper drainage and raised beds are a must for management of nursery diseases, formulations *Trichoderma harzianum* and *T. viridae* can be used for seed and soil treatment as well as foliar application against the fungal pathogens, Crop rotation should be followed for starving the pathogens and declining their population, One percent Bordeaux mixture can be applied as root dip, soil drench and foliar spray, bordeaux paint applied on the trunk and pruned wounds of citrus prevent pathogens attack
- Banana crop is infested by a number of pest and disease. Disease can be controlled with frequent applications of fungicides, certifying seed, and cultural practices, such as practise of good hygiene, avoid large areas of any one variety of crop, especially in high disease areas, regular monitor of crops for diseases and resistance, and adequate spacing of plants and efficient drainage within plantation

Khasi Mandarin	New flush		*Proper monitoring should be done for trunk borers. Collect and destroy them wherever feasible and inject petrol or nuvan into the holes and plug the holes with mud.*
Cucurbits	Vegetative to flowering stage	Red pumpkin beetle	*Monitor the plants against **red pumpkin beetle** in cucurbits especially bottle gourd, pumpkin, cucumber, water melon etc. Adults are small, elongated yellow and defoliate the leaves immediately after germination. Larvae feed on roots and plant parts. Mechanically collect and destroy the pest if incidence is low.*
Okra	Fruiting stage	Fruit and shoot borer	*Collect and destroy all the infested fruits.* *Timely earthing up should be done*
Brinjal	Ratoon crop	Shoot and fruit borer	*Incidence of **Shoot and fruit borer** usually occurs during humid conditions after the rainfall. Small brown caterpillars bore into the top tender shoots and tunnel downwards the main axis which wither, droop down and growing points are killed and later on they bore into the fruits and feed within. Affected fruits become unfit for consumption. Infested fruits and shoots should be removed regularly and buried deep in the soil.*
Ginger / turmeric	Vegetative stage	Rhizome rot	*The plot should be well drained free from water logging and while planting healthy rhizomes should be used for cultivation so as to prevent rhizome rot.* *Maintain proper drainage in the field of ginger to prevent diseases. The field must be inspected regularly for disease appearance and more often when it rains.*

Livestock

- Water stagnation should be avoided in livestock shed to avoid mosquito breeding

Poultry	• Shades from tall trees and plantation around the sheds can reduce the radiant heat. The plantation of trees should be such that trees will be leafy during summer and bald during winter • Thatching of roof with paddy straw or sugar cane leaves will reduce temperature inside the shed • For day old chicks provide cool water and electrolytes on their arrival to farm before offering feed to avoid dehydration after transportation • Shifting, transportation, de-beaking and vaccination should be done during night or cool hours of the day
Piggery	• Identify and isolate the infected and in contact animals • Dispose the dead animals either by burning or deep burial

	• Regular disinfection of shed and its premises with 1-2 % phenyl • Regular de-worming to control internal parasites • Keep the animal house clean and dry
Fisheries	
	• By this month, renovation of old pond and excavation of new pond should be completed. • Proper inspection of work should be done for new pond • Adopt culture practice as per the technical advice • If the management measures are followed accordingly, a good harvest can be expected. It is advisable to consult a fisheries expert prior to taking any management measures

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Integrated Agromet Advisory Service Bulletin from 6th to 10th June '18

Peren District

Bulletin No:45/2018

ICAR RESEARCH COMPLEX FOR NEH REGION
(Indian Council of Agricultural Research)
NAGALAND CENTER, JHARNAPANI. MEDZIPHEMA

Weather summary of the preceding week	*Weather forecast valid upto 10th June 2018*
▪ Moderate rain occurred the past week ▪ Maximum and minimum temperatures ranged 26^0C to 27^0C and 16^0C to 18^0C, respectively. ▪ Relative humidity varied from 60% to 94%. ▪ Wind speed ranged from 2 to 3 kmph	▪ Probability of moderate rain the coming week. ▪ **Max temp** is likely to be 26^0C - 27^0C and the **min temp** 17^0C to 18^0C ▪ **Sky is likely to be mainly cloudy** the coming week ▪ **Relative Humidity** is likely to range from 56% to 96%. ▪ **Wind speed** may reach upto 2-3 kmph **Wind direction** will be mostly southerly

- Locally available nutrient resources should always be preferred along with the external nutrient inputs to make the farming system more sustainable.
- Neem products should be incorporated as they are non-toxic and are a safe alternative to commercially manufactured chemical fertilisers. Spraying should be undertaken in the morning or late in the afternoon. Insects lay eggs on the underside of the leaves. Hence it is important to spray on the underside of the leaves as well.
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Field crops

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
Jhum Paddy	Vegetative stage	-	*High humidity favour the disease incidence. It is a severe fungal disease. Typical spindle shaped leaf lesions, wide at centre and pointed toward either end are seen. In severe cases they coalesce and the leaves die. Neck and panicle infection causes chaffy and shriveled grains.* *Maintain rice fields free from weeds which give shelter to many pathogens*
Paddy	Storage		• *Place sticky traps in the drying and storage areas for rats.* • *Storage rooms should be physically rodent and bird proof, if possible.* • *Inspect the stored seeds once a week for signs of insect infestation.*
Green gram	Flowering stage	-	*Clean cultivation should be maintained. Proper earthing up should be done*
Maize	Tasseling stage		*Timely weeding and earthing up should be done so as to prevent the plants from lodging*

Horticultural crop

- For disease management proper drainage and raised beds are a must for management of nursery diseases, formulations *Trichoderma harzianum* and *T. viridae* can be used for seed and soil treatment as well as foliar application against the fungal pathogens, Crop rotation should be followed for starving the pathogens and declining their population, One percent Bordeaux mixture can be applied as root dip, soil drench and foliar spray, bordeaux paint applied on the trunk and pruned wounds of citrus prevent pathogens attack
- Banana crop is infested by a number of pest and disease. Disease can be controlled with frequent applications of fungicides, certifying seed, and cultural practices, such as practise of good hygiene, avoid large areas of any one variety of crop, especially in high disease areas, regular monitor of crops for diseases and resistance, and adequate spacing of plants and efficient drainage within plantation

Khasi Mandarin	New flush		*Proper monitoring should be done for trunk borers. Collect and destroy them wherever feasible and inject petrol or nuvan into the holes and plug the holes with mud.*
Cucurbits	Vegetative to flowering stage	Red pumpkin beetle	*Monitor the plants against **red pumpkin beetle** in cucurbits especially bottle gourd, pumpkin, cucumber, water melon etc. Adults are small, elongated yellow and defoliate the leaves immediately after germination. Larvae feed on roots and plant parts. Mechanically collect and destroy the pest if incidence is low.*
Okra	Fruiting stage	Fruit and shoot borer	*Collect and destroy all the infested fruits.* *Timely earthing up should be done*
Brinjal	Ratoon crop	Shoot and fruit borer	*Incidence of **Shoot and fruit borer** usually occurs during humid conditions after the rainfall. Small brown caterpillars bore into the top tender shoots and tunnel downwards the main axis which wither, droop down and growing points are killed and later on they bore into the fruits and feed within. Affected fruits become unfit for consumption. Infested fruits and shoots should be removed regularly and buried deep in the soil.*
Ginger / turmeric	Vegetative stage	Rhizome rot	*The plot should be well drained free from water logging and while planting healthy rhizomes should be used for cultivation so as to prevent rhizome rot.* *Maintain proper drainage in the field of ginger to prevent diseases. The field must be inspected regularly for disease appearance and more often when it rains.*

Livestock

- Water stagnation should be avoided in livestock shed to avoid mosquito breeding

Poultry	• Shades from tall trees and plantation around the sheds can reduce the radiant heat. The plantation of trees should be such that trees will be leafy during summer and bald during winter • Thatching of roof with paddy straw or sugar cane leaves will reduce temperature inside the shed • For day old chicks provide cool water and electrolytes on their arrival to farm before offering feed to avoid dehydration after transportation • Shifting, transportation, de-beaking and vaccination should be done during night or cool hours of the day

	Piggery	• Identify and isolate the infected and in contact animals • Dispose the dead animals either by burning or deep burial • Regular disinfection of shed and its premises with 1-2 % phenyl • Regular de-worming to control internal parasites • Keep the animal house clean and dry
	Fisheries	
		• By this month, renovation of old pond and excavation of new pond should be completed. • Proper inspection of work should be done for new pond • Adopt culture practice as per the technical advice If the management measures are followed accordingly, a good harvest can be expected. It is advisable to consult a fisheries expert prior to taking any management measures

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Integrated Agromet Advisory Service Bulletin from 6th to 10th June '18
Phek District

Bulletin No:45/2018

ICAR RESEARCH COMPLEX FOR NEH REGION
(Indian Council of Agricultural Research)
NAGALAND CENTER,JHARNAPANI, MEDZIPHEMA

Weather summary of the preceding week	*Weather forecast valid upto 10th June 2018*
▪ Moderate rain occurred the past week ▪ Maximum and minimum temperatures ranged 24^0C to 25^0C and 14^0C to 16^0C, respectively. ▪ Relative humidity varied from 28% to 92%. ▪ Wind speed ranged from 2 to 3 kmph	▪ Probability of moderate rain the coming week. ▪ **Max temp** is likely to be 25^0C - 26^0C and the **min temp** 13^0C to 14^0C ▪ **Sky is likely to be mainly cloudy** the coming week ▪ **Relative Humidity** is likely to range from 54% to 95%. ▪ **Wind speed** may reach upto 1-2 kmph **Wind direction** will be mostly southeasterly

- Locally available nutrient resources should always be preferred along with the external nutrient inputs to make the farming system more sustainable.
- Neem products should be incorporated as they are non-toxic and are a safe alternative to commercially manufactured chemical fertilisers. Spraying should be undertaken in the morning or late in the afternoon. Insects lay eggs on the underside of the leaves. Hence it is important to spray on the underside of the leaves as well.
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Field crops

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
Jhum Paddy	Vegetative stage	-	*High humidity favour the disease incidence. It is a severe fungal disease. Typical spindle shaped leaf lesions, wide at centre and pointed toward either end are seen. In severe cases they coalesce and the leaves die. Neck and panicle infection causes chaffy and shriveled grains.* *Maintain rice fields free from weeds which give shelter to many pathogens*
Paddy	Storage		• *Place sticky traps in the drying and storage areas for rats.* • *Storage rooms should be physically rodent and bird proof, if possible.* • *Inspect the stored seeds once a week for signs of insect infestation.*
Green gram	Flowering stage	-	*Clean cultivation should be maintained. Proper earthing up should be done*
Maize	Tasseling stage		*Timely weeding and earthing up should be done so as to prevent the plants from lodging*

Horticultural crop • For disease management proper drainage and raised beds are a must for management of nursery diseases, formulations *Trichoderma harzianum* and *T. viridae* can be used for seed and soil treatment as well as foliar application against the fungal pathogens, Crop rotation should be followed for starving the pathogens and declining their population, One percent Bordeaux mixture can be applied as root dip, soil drench and foliar spray, bordeaux paint applied on the trunk and pruned wounds of citrus prevent pathogens attack • Banana crop is infested by a number of pest and disease. Disease can be controlled with frequent applications of fungicides, certifying seed, and cultural practices, such as practise of good hygiene, avoid large areas of any one variety of crop, especially in high disease areas, regular monitor of crops for diseases and resistance, and adequate spacing of plants and efficient drainage within plantation			
Khasi Mandarin	New flush		*Proper monitoring should be done for trunk borers. Collect and destroy them wherever feasible and inject petrol or nuvan into the holes and plug the holes with mud.*
Cucurbits	Vegetative to flowering stage	Red pumpkin beetle	*Monitor the plants against **red pumpkin beetle** in cucurbits especially bottle gourd, pumpkin, cucumber, water melon etc. Adults are small, elongated yellow and defoliate the leaves immediately after germination. Larvae feed on roots and plant parts. Mechanically collect and destroy the pest if incidence is low.*
Okra	Fruiting stage	Fruit and shoot borer	*Collect and destroy all the infested fruits.* *Timely earthing up should be done*
Brinjal	Ratoon crop	Shoot and fruit borer	*Incidence of **Shoot and fruit borer** usually occurs during humid conditions after the rainfall. Small brown caterpillars bore into the top tender shoots and tunnel downwards the main axis which wither, droop down and growing points are killed and later on they bore into the fruits and feed within. Affected fruits become unfit for consumption. Infested fruits and shoots should be removed regularly and buried deep in the soil.*
Ginger / turmeric	Vegetative stage	Rhizome rot	*The plot should be well drained free from water logging and while planting healthy rhizomes should be used for cultivation so as to prevent rhizome rot.* *Maintain proper drainage in the field of ginger to prevent diseases. The field must be inspected regularly for disease appearance and more often when it rains.*
Livestock • Water stagnation should be avoided in livestock shed to avoid mosquito breeding			
Poultry	• Shades from tall trees and plantation around the sheds can reduce the radiant heat. The plantation of trees should be such that trees will be leafy during summer and bald during winter • Thatching of roof with paddy straw or sugar cane leaves will reduce temperature inside the shed • For day old chicks provide cool water and electrolytes on their arrival to farm before offering feed to avoid		

		dehydration after transportation • Shifting, transportation, de-beaking and vaccination should be done during night or cool hours of the day
	Piggery	• Identify and isolate the infected and in contact animals • Dispose the dead animals either by burning or deep burial • Regular disinfection of shed and its premises with 1-2 % phenyl • Regular de-worming to control internal parasites • Keep the animal house clean and dry
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Integrated Agromet Advisory Service Bulletin from 6th to 10th June '18
Tuensang District

Bulletin No:45/2018

ICAR RESEARCH COMPLEX FOR NEH REGION
(Indian Council of Agricultural Research)
NAGALAND CENTER,JHARNAPANI. MEDZIPHEMA

Weather summary of the preceding week	*Weather forecast valid upto 10th June 2018*
▪ Moderate rain occurred the past week ▪ Maximum and minimum temperatures ranged 21^0C to 22^0C and 10^0C to 13^0C, respectively. ▪ Relative humidity varied from 65% to 95%. ▪ Wind speed ranged from 2 to 3 kmph	▪ Probability of moderate rain the coming week. ▪ **Max temp** is likely to be 23^0C - 24^0C and the **min temp** 13^0C to 14^0C ▪ **Sky is likely to be mainly cloudy** the coming week ▪ **Relative Humidity** is likely to range from 63% to 95%. ▪ **Wind speed** may reach upto 2-3 kmph ▪ **Wind direction** will be mostly southerly

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Field crops

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
Jhum Paddy	Vegetative stage	-	*High humidity favour the disease incidence. It is a severe fungal disease. Typical spindle shaped leaf lesions, wide at centre and pointed toward either end are seen. In severe cases they coalesce and the leaves die. Neck and panicle infection causes chaffy and shriveled grains.* *Maintain rice fields free from weeds which give shelter to many pathogens*
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	Okra	Fruiting stage	Fruit and shoot borer	*Collect and destroy all the infested fruits.* *Timely earthing up should be done*
	Brinjal	Ratoon crop	Shoot and fruit borer	*Incidence of **Shoot and fruit borer** usually occurs during humid conditions after the rainfall. Small brown caterpillars bore into the top tender shoots and tunnel downwards the main axis which wither, droop down and growing points are killed and later on they bore into the fruits and feed within. Affected fruits become unfit for consumption. Infested fruits and shoots should be removed regularly and buried deep in the soil.*
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	Piggery	• Identify and isolate the infected and in contact animals • Dispose the dead animals either by burning or deep burial • Regular disinfection of shed and its premises with 1-2 % phenyl • Regular de-worming to control internal parasites • Keep the animal house clean and dry
	Fisheries	
		• By this month, renovation of old pond and excavation of new pond should be completed. • Proper inspection of work should be done for new pond • Adopt culture practice as per the technical advice If the management measures are followed accordingly, a good harvest can be expected. It is advisable to consult a fisheries expert prior to taking any management measures

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Integrated Agromet Advisory Service Bulletin from 6th to 10th June '18
Wokha District

Bulletin No:45/2018

ICAR RESEARCH COMPLEX FOR NEH REGION
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NAGALAND CENTER, JHARNAPANI.MEDZIPHEMA

Weather summary of the preceding week	*Weather forecast valid upto 10th June 2018*
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Field crops

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
Jhum Paddy	Vegetative stage	-	*High humidity favour the disease incidence. It is a severe fungal disease. Typical spindle shaped leaf lesions, wide at centre and pointed toward either end are seen. In severe cases they coalesce and the leaves die. Neck and panicle infection causes chaffy and shriveled grains. Maintain rice fields free from weeds which give shelter to many pathogens*
Paddy	Storage		• *Place sticky traps in the drying and storage areas for rats.* • *Storage rooms should be physically rodent and bird proof, if possible.* • *Inspect the stored seeds once a week for signs of insect infestation.*
Green gram	Flowering stage	-	*Clean cultivation should be maintained. Proper earthing up should be done*
Maize	Tasseling stage		*Timely weeding and earthing up should be done so as to prevent the plants from lodging*

Horticultural crop			
• For disease management proper drainage and raised beds are a must for management of nursery diseases, formulations *Trichoderma harzianum* and *T. viridae* can be used for seed and soil treatment as well as foliar application against the fungal pathogens, Crop rotation should be followed for starving the pathogens and declining their population, One percent Bordeaux mixture can be applied as root dip, soil drench and foliar spray, bordeaux paint applied on the trunk and pruned wounds of citrus prevent pathogens attack • Banana crop is infested by a number of pest and disease. Disease can be controlled with frequent applications of fungicides, certifying seed, and cultural practices, such as practise of good hygiene, avoid large areas of any one variety of crop, especially in high disease areas, regular monitor of crops for diseases and resistance, and adequate spacing of plants and efficient drainage within plantation			
Khasi Mandarin	New flush		*Proper monitoring should be done for trunk borers. Collect and destroy them wherever feasible and inject petrol or nuvan into the holes and plug the holes with mud.*
Cucurbits	Vegetative to flowering stage	Red pumpkin beetle	*Monitor the plants against **red pumpkin beetle** in cucurbits especially bottle gourd, pumpkin, cucumber, water melon etc. Adults are small, elongated yellow and defoliate the leaves immediately after germination. Larvae feed on roots and plant parts. Mechanically collect and destroy the pest if incidence is low.*
Okra	Fruiting stage	Fruit and shoot borer	*Collect and destroy all the infested fruits.* *Timely earthing up should be done*
Brinjal	Ratoon crop	Shoot and fruit borer	*Incidence of **Shoot and fruit borer** usually occurs during humid conditions after the rainfall. Small brown caterpillars bore into the top tender shoots and tunnel downwards the main axis which wither, droop down and growing points are killed and later on they bore into the fruits and feed within. Affected fruits become unfit for consumption. Infested fruits and shoots should be removed regularly and buried deep in the soil.*
Ginger / turmeric	Vegetative stage	Rhizome rot	*The plot should be well drained free from water logging and while planting healthy rhizomes should be used for cultivation so as to prevent rhizome rot.* *Maintain proper drainage in the field of ginger to prevent diseases. The field must be inspected regularly for disease appearance and more often when it rains.*
Livestock			
• Water stagnation should be avoided in livestock shed to avoid mosquito breeding			

	Poultry	• Shades from tall trees and plantation around the sheds can reduce the radiant heat. The plantation of trees should be such that trees will be leafy during summer and bald during winter • Thatching of roof with paddy straw or sugar cane leaves will reduce temperature inside the shed • For day old chicks provide cool water and electrolytes on their arrival to farm before offering feed to avoid dehydration after transportation • Shifting, transportation, de-beaking and vaccination should be done during night or cool hours of the day
	Piggery	• Identify and isolate the infected and in contact animals • Dispose the dead animals either by burning or deep burial • Regular disinfection of shed and its premises with 1-2 % phenyl • Regular de-worming to control internal parasites • Keep the animal house clean and dry
	Fisheries	
		• By this month, renovation of old pond and excavation of new pond should be completed. • Proper inspection of work should be done for new pond • Adopt culture practice as per the technical advice If the management measures are followed accordingly, a good harvest can be expected. It is advisable to consult a fisheries expert prior to taking any management measures

SCIENTIFIC EXPERT COMMITTEE

Sl.no	Name	Designation	Department	
1	Dr.D.J. Rajkhowa	Principle Scientist	Agronomy	djrajkhowa@gmail.com
2	Dr. L.K. Baishya	Senior Scientist	Agronomy	lkbicar@gmail.com
3	Ph. Romen Sharma	Scientist	Agricultural Extension	romen.agext@gmail.com
4	Dr. Rajesha G	Scientist	Plant Pathology	rajeshag337@gmail.com
5	Dr. Mahak Singh	Scientist	Animal Reproduction & Gynaecology	mahaksinghivri@gmail.com
6	Dr. Azeze Seyie	Scientist	Spices, Plantation & Medicinal & Aromatic Plants	azezeseyie@yahoo.com
7	Jyotish Barman	Scientist	Fisheries Resource Management	jyotish5@gmail.com
8	Aabon W Yanthan	Scientist	Vegetable Science	aabon.iari@gmail.com


भाकृअनुप
ICAR

Integrated Agromet Advisory Service Bulletin from 6th to 10th June '18
Zunheboto District

Bulletin No:45/2018

ICAR RESEARCH COMPLEX FOR NEH REGION
(Indian Council of Agricultural Research)
NAGALAND CENTER,JHARNAPANI. MEDZIPHEMA

Weather summary of the preceding week	*Weather forecast valid upto 10th June 2018*
▪ Moderate rain occurred the past week ▪ Maximum and minimum temperatures ranged 24^0C to 26^0C and 15^0C to 17^0C, respectively. ▪ Relative humidity varied from 75% to 94%. ▪ Wind speed ranged from 4 to 5 kmph	▪ Probability of moderate rain the coming week. ▪ **Max temp** is likely to be 26^0C - 27^0C and the **min temp** 17^0C to 18^0C ▪ **Sky is likely to be mainly cloudy** the coming week ▪ **Relative Humidity** is likely to range from 56% to 96%. ▪ **Wind speed** may reach upto 2-3 kmph **Wind direction** will be southeasterly

- Locally available nutrient resources should always be preferred along with the external nutrient inputs to make the farming system more sustainable.
- Neem products should be incorporated as they are non-toxic and are a safe alternative to commercially manufactured chemical fertilisers. Spraying should be undertaken in the morning or late in the afternoon. Insects lay eggs on the underside of the leaves. Hence it is important to spray on the underside of the leaves as well.
- Low cost rain water harvesting structure (Jalkund) should be incorporated as it provides irrigation in lean season and provides healthy food. It also increases the production and productivity of high value vegetables crops and generates additional net monetary income of the farmer.

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