



Integrated Agromet Advisory Service Bulletin from 12th to 16th April'17

Kohima District

Bulletin No:27/2017

Weather summary of the preceding week

- Light rain occurred the past week
- Maximum and minimum temperatures ranged 24^oC to 30^oC and 11^oC to 14^oC, respectively.
- Relative humidity varied from 17% to 90%.
- Wind speed ranged from 1 to 2 kmph

Weather forecast valid upto 16th April'17

- Probability of light rain the coming week.
- **Max temp** is likely to be 29^oC - 30^oC and the **min temp** 18^oC to 20^oC
- **Sky is likely to be clear** the coming week
- **Relative Humidity** is likely to range from 21% to 78%.
- **Wind speed** may reach upto 2- 4 kmph
- **Wind direction** will be easterly

Field crops

General Recommendations

- Short duration pulse crops and green manuring crops like dhaincha, sunnhemp etc should be planted as pre-kharif crop in fallow paddy lowland/ Terrace Rice field to enhance the soil fertility.
- Due to variable weather, farmers are advised to do constant monitoring against attack of pest and disease in vegetable crop, if symptom is observed then take protection measures as per recommendation when sky remain clear.

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
<i>Jhum paddy</i>			<i>Maize and pulses should be grown as strip crop in hill slopes</i>
<i>TRC/WRC paddy</i>			<i>Crop rotation should be adopted to break the cycle between insect pests or pathogen and host plant.</i>
<i>Summer maize</i>	Vegetative stage		<i>Use only good quality seeds.</i>
<i>Green gram</i>	Germination stage		<i>Proper earthing up should be carried out.</i>

Horticultural crop

<i>Mandarin</i>			<ul style="list-style-type: none"> • <i>During this season, single spray of bavistin (0.1%) should be done</i> • <i>After 15 days spray the bordeaux mixture (1%)</i>
<i>Okra</i>	Germination stage		<ul style="list-style-type: none"> <i>Grow maize on borders as a barrier to prevent the entry of shoot & fruit borer adults</i> <i>Timely remove and destroy the alternate weed hosts near the surrounding field</i>

Potato	Flowering stage		<ul style="list-style-type: none"> • <i>Light hoeing/ earthing up should be done for 40-45 days old plant.</i>
		Potato aphids	<ul style="list-style-type: none"> • <i>Check for potato aphids which transmits potato leaf curl virus. Aphids pierce veins, stems, growing tips, and blossoms with their needle-like mouthparts. As a result, blossoms shed and yield is reduced. New growth becomes stunted and curled. Heavily infested plants turn brown and die from the top down. Aphids tend to spread rapidly from field to field</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the affected plant/parts and regular monitoring of field for disease should be done.</i> • <i>Provide proper earthing up (15cm height) to reduce the infection of tubers.</i>
Cucurbits	Sowing stage		<ul style="list-style-type: none"> • <i>In present weather condition, start sowing of cucurbits crops. Direct sowing can be done.</i> • <i>Seed should be treated with captan/Thiram @ 2 gm/kg of seed before sowing. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i> • <i>Spray ethrel (plant growth regulator) @0.2 ml in 1 lt of water at 2 true leaf stage and second spray at 4 true leaf stage to increase the number of fruits.</i>
Summer vegetables	Germination stage		<ul style="list-style-type: none"> • <i>For spring summer vegetables, the young seedlings should be taken care properly. Monitor the field for damping off and other fungal disease. Take proper measures.</i>
Tomato	Maturity to harvesting stage		<ul style="list-style-type: none"> • <i>Harvest during morning hours when the temperature is low.</i> • <i>For distant market, harvest at green mature stage. For local market, harvest at pink stage or ripe stage.</i>
		Borer	<ul style="list-style-type: none"> • <i>Installed bird perches in tomato crop to control fruit borer insect. Handpicking of damaged fruit and burying are advised.</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the disease infected plant parts and fruits. Regular monitoring of disease should be done.</i> <p><i>Staking of plant reduces the disease incidence</i></p>
Brinjal	Transplanting stage		<ul style="list-style-type: none"> • <i>Transplanting of young seedlings of brinjal may be done in prepared fields. Seed treatment should be done. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i>
Naga king	Transplanting	Damping off	<i>February sown king chilli may be transplanted in the field at 90-100cm</i>

	chilli	stage		<i>spacing. Well decomposed FYM/vermicompost or other locally available manures should be applied.</i>
	Fruit trees			<i>Pits for fruit plantations should be ready for May - June planting (1x1x1) m3 pit size.</i>
	Mango		Mango hopper	<i>In mango orchard, farmers are advised for monitoring the mango hopper. Infected inflorescence should be destroyed.</i>
	Livestock			
	Poultry	<ul style="list-style-type: none"> • Vanaraja, a dual purpose bird is suitable for backyard poultry farming due to its high production potential in terms of meat and egg than that of local/desi bird (low produces of meat and egg). It thrives well under low feeding and managemental practices due to its adaptability and local climatic conditions. • Srinidhi, a coloured bird of egg laying type, suitable for rural poultry farming. • Vaccinate the bird against Ranikhet disease 		
	Piggery	<ul style="list-style-type: none"> • Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. Keep floor dry to avoid skin diseases. • Do AI (Artificial Insemination) in sow for breeding purpose • Deworming of pig at every 6 month interval 		
	Fishery	<ul style="list-style-type: none"> • Rake the pond bottom and allow to dry. • Apply lime powder over dry surface of the pond bottom. • Clear jungle and do minor repairing of dyke. 		

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 12th to 16th April'17

Longleng District

Bulletin No:27/2017

Weather summary of the preceding week

- Light rain occurred the past week
- Maximum and minimum temperatures ranged 24⁰C to 27⁰C and 12⁰C to 14⁰C, respectively.
- Relative humidity varied from 22% to 95%.
- Wind speed ranged from 1 to 2 kmph

Weather forecast valid upto 16th April'17

- Probability of light rain the coming week.
- **Max temp** is likely to be 29⁰C - 30⁰C and the **min temp** 19⁰C to 20⁰C
- **Sky is likely to be mainly cloudy** the coming week
- **Relative Humidity** is likely to range from 36% to 91%.
- **Wind speed** may reach upto 1- 2 kmph
- **Wind direction** will be mostly southeasterly

Field crops

General Recommendations

- Short duration pulse crops and green manuring crops like dhaincha, sunnhemp etc should be planted as pre-kharif crop in fallow paddy lowland/ Terrace Rice field to enhance the soil fertility.
- Due to variable weather, farmers are advised to do constant monitoring against attack of pest and disease in vegetable crop, if symptom is observed then take protection measures as per recommendation when sky remain clear.

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
<i>Jhum paddy</i>			<i>Maize and pulses should be grown as strip crop in hill slopes</i>
<i>TRC/WRC paddy</i>			<i>Crop rotation should be adopted to break the cycle between insect pests or pathogen and host plant.</i>
<i>Summer maize</i>	Vegetative stage		<i>Use only good quality seeds.</i>
<i>Green gram</i>	Germination stage		<i>Proper earthing up should be carried out.</i>

Horticultural crop

<i>Mandarin</i>			<ul style="list-style-type: none"> • During this season, single spray of bavistin (0.1%) should be done • After 15 days spray the bordeaux mixture (1%)
<i>Okra</i>	Germination stage		<p><i>Grow maize on borders as a barrier to prevent the entry of shoot & fruit borer adults</i></p> <p><i>Timely remove and destroy the alternate weed hosts near the surrounding field</i></p>

Potato	Flowering stage		<ul style="list-style-type: none"> • <i>Light hoeing/ earthing up should be done for 40-45 days old plant.</i>
		Potato aphids	<ul style="list-style-type: none"> • <i>Check for potato aphids which transmits potato leaf curl virus. Aphids pierce veins, stems, growing tips, and blossoms with their needle-like mouthparts. As a result, blossoms shed and yield is reduced. New growth becomes stunted and curled. Heavily infested plants turn brown and die from the top down. Aphids tend to spread rapidly from field to field</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the affected plant/parts and regular monitoring of field for disease should be done.</i> • <i>Provide proper earthing up (15cm height) to reduce the infection of tubers.</i>
Cucurbits	Sowing stage		<ul style="list-style-type: none"> • <i>In present weather condition, start sowing of cucurbits crops. Direct sowing can be done.</i> • <i>Seed should be treated with captan/Thiram @ 2 gm/kg of seed before sowing. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i> • <i>Spray ethrel (plant growth regulator) @0.2 ml in 1 lt of water at 2 true leaf stage and second spray at 4 true leaf stage to increase the number of fruits.</i>
Summer vegetables	Germination stage		<ul style="list-style-type: none"> • <i>For spring summer vegetables, the young seedlings should be taken care properly. Monitor the field for damping off and other fungal disease. Take proper measures.</i>
Tomato	Maturity to harvesting stage		<ul style="list-style-type: none"> • <i>Harvest during morning hours when the temperature is low.</i> • <i>For distant market, harvest at green mature stage. For local market, harvest at pink stage or ripe stage.</i>
		Borer	<ul style="list-style-type: none"> • <i>Installed bird perches in tomato crop to control fruit borer insect.</i> <p><i>Handpicking of damaged fruit and burying are advised.</i></p>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the disease infected plant parts and fruits. Regular monitoring of disease should be done.</i> • <i>Staking of plant reduces the disease incidence</i>
Brinjal	Transplanting stage		<ul style="list-style-type: none"> • <i>Transplanting of young seedlings of brinjal may be done in prepared fields. Seed treatment should be done. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i>

	Naga king chilli	Transplanting stage	Damping off	<i>February sown king chilli may be transplanted in the field at 90-100cm spacing. Well decomposed FYM/vermicompost or other locally available manures should be applied.</i>
	Fruit trees			<i>Pits for fruit plantations should be ready for May - June planting (1x1x1) m³ pit size.</i>
	Mango		Mango hopper	<i>In mango orchard, farmers are advised for monitoring the mango hopper. Infected inflorescence should be destroyed.</i>
Livestock				
	Poultry	<ul style="list-style-type: none"> • Vanaraja, a dual purpose bird is suitable for backyard poultry farming due to its high production potential in terms of meat and egg than that of local/desi bird (low produces of meat and egg). It thrives well under low feeding and managerial practices due to its adaptability and local climatic conditions. • Srinidhi, a coloured bird of egg laying type, suitable for rural poultry farming. • Vaccinate the bird against Ranikhet disease 		
	Piggery	<ul style="list-style-type: none"> • Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. Keep floor dry to avoid skin diseases. • Do AI (Artificial Insemination) in sow for breeding purpose • Deworming of pig at every 6 month interval 		
	Fishery	<ul style="list-style-type: none"> • Rake the pond bottom and allow to dry. • Apply lime powder over dry surface of the pond bottom. • Clear jungle and do minor repairing of dyke. 		

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 &	azezeseyie@yahoo.com

			Aromatic Plants	
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 12th to 16th April'17

Mokokchung District

Bulletin No:27/2017

Weather summary of the preceding week

- Light rain occurred the past week
- Maximum and minimum temperatures ranged 26^oC to 29^oC and 13^oC to 14^oC, respectively.
- Relative humidity varied from 20% to 85%.
- Wind speed ranged from 1 to 2 kmph

Weather forecast valid upto 16th April'17

- Probability of light rain the coming week.
- **Max temp** is likely to be 30^oC - 31^oC and the **min temp** 16^oC to 19^oC
- **Sky is likely to be clear** the coming week
- **Relative Humidity** is likely to range from 20% to 83%.
- **Wind speed** may reach upto 2- 3 kmph
- **Wind direction** will be southeasterly

Field crops

General Recommendations

- Short duration pulse crops and green manuring crops like dhaincha, sunnhemp etc should be planted as pre-kharif crop in fallow paddy lowland/ Terrace Rice field to enhance the soil fertility.
- Due to variable weather, farmers are advised to do constant monitoring against attack of pest and disease in vegetable crop, if symptom is observed then take protection measures as per recommendation when sky remain clear.

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
<i>Jhum paddy</i>			<i>Maize and pulses should be grown as strip crop in hill slopes</i>
<i>TRC/WRC paddy</i>			<i>Crop rotation should be adopted to break the cycle between insect pests or pathogen and host plant.</i>
<i>Summer maize</i>	Vegetative stage		<i>Use only good quality seeds.</i>
<i>Green gram</i>	Germination stage		<i>Proper earthing up should be carried out.</i>

Horticultural crop

<i>Mandarin</i>			<ul style="list-style-type: none"> • <i>During this season, single spray of bavistin (0.1%) should be done</i> • <i>After 15 days spray the bordeaux mixture (1%)</i>
<i>Okra</i>	Germination stage		<ul style="list-style-type: none"> • <i>Grow maize on borders as a barrier to prevent the entry of shoot & fruit borer adults</i> • <i>Timely remove and destroy the alternate weed hosts near the surrounding field</i>
<i>Potato</i>	Flowering stage		<ul style="list-style-type: none"> • <i>Light hoeing/ earthing up should be done for 40-45 days old plant.</i>

		Potato aphids	<ul style="list-style-type: none"> • Check for potato aphids which transmits potato leaf curl virus. Aphids pierce veins, stems, growing tips, and blossoms with their needle-like mouthparts. As a result, blossoms shed and yield is reduced. New growth becomes stunted and curled. Heavily infested plants turn brown and die from the top down. Aphids tend to spread rapidly from field to field
		Early blight and late blight	<ul style="list-style-type: none"> • Remove the affected plant/parts and regular monitoring of field for disease should be done. • Provide proper earthing up (15cm height) to reduce the infection of tubers.
Cucurbits	Sowing stage		<ul style="list-style-type: none"> • In present weather condition, start sowing of cucurbits crops. Direct sowing can be done. • Seed should be treated with captan/Thiram @ 2 gm/kg of seed before sowing. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing. • Spray ethrel (plant growth regulator) @0.2 ml in 1 lt of water at 2 true leaf stage and second spray at 4 true leaf stage to increase the number of fruits.
Summer vegetables	Germination stage		<ul style="list-style-type: none"> • For spring summer vegetables, the young seedlings should be taken care properly. Monitor the field for damping off and other fungal disease. Take proper measures.
Tomato	Maturity to harvesting stage		<ul style="list-style-type: none"> • Harvest during morning hours when the temperature is low. • For distant market, harvest at green mature stage. For local market, harvest at pink stage or ripe stage.
		Borer	<ul style="list-style-type: none"> • Installed bird perches in tomato crop to control fruit borer insect. Handpicking of damaged fruit and burying are advised.
		Early blight and late blight	<ul style="list-style-type: none"> • Remove the disease infected plant parts and fruits. Regular monitoring of disease should be done. • Staking of plant reduces the disease incidence
Brinjal	Transplanting stage		<ul style="list-style-type: none"> • Transplanting of young seedlings of brinjal may be done in prepared fields. Seed treatment should be done. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.
Naga king chilli	Transplanting stage	Damping off	February sown king chilli may be transplanted in the field at 90-100cm spacing. Well decomposed FYM/vermicompost or other locally available manures should be applied.
Fruit trees			Pits for fruit plantations should be ready for May - June planting (1x1x1) m ³ pit size.
Mango		Mango hopper	In mango orchard, farmers are advised for monitoring the mango hopper. Infected inflorescence should be destroyed.

<i>Livestock</i>			
	<i>Poultry</i>	<ul style="list-style-type: none"> • Vanaraja, a dual purpose bird is suitable for backyard poultry farming due to its high production potential in terms of meat and egg than that of local/desi bird (low produces of meat and egg). It thrives well under low feeding and managerial practices due to its adaptability and local climatic conditions. • Srinidhi, a coloured bird of egg laying type, suitable for rural poultry farming. • Vaccinate the bird against Ranikhet disease 	
	<i>Piggery</i>	<ul style="list-style-type: none"> • Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. Keep floor dry to avoid skin diseases. • Do AI (Artificial Insemination) in sow for breeding purpose • Deworming of pig at every 6 month interval 	
	<i>Fishery</i>	<ul style="list-style-type: none"> • Rake the pond bottom and allow to dry. • Apply lime powder over dry surface of the pond bottom. • Clear jungle and do minor repairing of dyke. 	



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 12th to 16th April'17 Mon District

Bulletin No:27/2017

<i>Weather summary of the preceding week</i>	<i>Weather forecast valid upto 16th April'17</i>
<ul style="list-style-type: none"> ▪ Light rain occurred the past week ▪ Maximum and minimum temperatures ranged 24^oC to 29^oC and 13^oC to 15^oC, respectively. ▪ Relative humidity varied from 22% to 95% ▪ Wind speed ranged from 1 to 2 kmph 	<ul style="list-style-type: none"> ▪ Probability of light rain the coming week. ▪ Max temp is likely to be 29^oC - 31^oC and the min temp 17^oC to 18^oC ▪ Sky is likely to be clear the coming week ▪ Relative Humidity is likely to range from 22% to 83%. ▪ Wind speed may reach upto 1- 2 kmph ▪ Wind direction will be mostly southeasterly

Field crops

General Recommendations

- Short duration pulse crops and green manuring crops like dhaincha, sunnhemp etc should be planted as pre-kharif crop in fallow paddy lowland/ Terrace Rice field to enhance the soil fertility.
- Due to variable weather, farmers are advised to do constant monitoring against attack of pest and disease in vegetable crop, if symptom is observed then take protection measures as per recommendation when sky remain clear.

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
<i>Jhum paddy</i>			<i>Maize and pulses should be grown as strip crop in hill slopes</i>
<i>TRC/WRC paddy</i>			<i>Crop rotation should be adopted to break the cycle between insect pests or pathogen and host plant.</i>
<i>Summer maize</i>	Vegetative stage		<i>Use only good quality seeds.</i>
<i>Green gram</i>	Germination stage		<i>Proper earthing up should be carried out.</i>

Horticultural crop

<i>Mandarin</i>			<ul style="list-style-type: none"> • <i>During this season, single spray of bavistin (0.1%) should be done</i> • <i>After 15 days spray the bordeaux mixture (1%)</i>
<i>Okra</i>	Germination stage		<ul style="list-style-type: none"> <i>Grow maize on borders as a barrier to prevent the entry of shoot & fruit borer adults</i> <i>Timely remove and destroy the alternate weed hosts near the surrounding field</i>

Potato	Flowering stage		<ul style="list-style-type: none"> • <i>Light hoeing/ earthing up should be done for 40-45 days old plant.</i>
		Potato aphids	<ul style="list-style-type: none"> • <i>Check for potato aphids which transmits potato leaf curl virus. Aphids pierce veins, stems, growing tips, and blossoms with their needle-like mouthparts. As a result, blossoms shed and yield is reduced. New growth becomes stunted and curled. Heavily infested plants turn brown and die from the top down. Aphids tend to spread rapidly from field to field</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the affected plant/parts and regular monitoring of field for disease should be done.</i> • <i>Provide proper earthing up (15cm height) to reduce the infection of tubers.</i>
Cucurbits	Sowing stage		<ul style="list-style-type: none"> • <i>In present weather condition, start sowing of cucurbits crops. Direct sowing can be done.</i> • <i>Seed should be treated with captan/Thiram @ 2 gm/kg of seed before sowing. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i> • <i>Spray ethrel (plant growth regulator) @0.2 ml in 1 lt of water at 2 true leaf stage and second spray at 4 true leaf stage to increase the number of fruits.</i>
Summer vegetables	Germination stage		<ul style="list-style-type: none"> • <i>For spring summer vegetables, the young seedlings should be taken care properly. Monitor the field for damping off and other fungal disease. Take proper measures.</i>
Tomato	Maturity to harvesting stage		<ul style="list-style-type: none"> • <i>Harvest during morning hours when the temperature is low.</i> • <i>For distant market, harvest at green mature stage. For local market, harvest at pink stage or ripe stage.</i>
		Borer	<ul style="list-style-type: none"> • <i>Installed bird perches in tomato crop to control fruit borer insect. Handpicking of damaged fruit and burying are advised.</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the disease infected plant parts and fruits. Regular monitoring of disease should be done.</i> • <i>Staking of plant reduces the disease incidence</i>
Brinjal	Transplanting stage		<ul style="list-style-type: none"> • <i>Transplanting of young seedlings of brinjal may be done in prepared fields. Seed treatment should be done. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i>
Naga king chilli	Transplanting stage	Damping off	<p><i>February sown king chilli may be transplanted in the field at 90-100cm spacing. Well decomposed FYM/vermicompost or other locally available manures should be applied.</i></p>

	Fruit trees			<i>Pits for fruit plantations should be ready for May - June planting (1x1x1) m³ pit size.</i>
	Mango		Mango hopper	<i>In mango orchard, farmers are advised for monitoring the mango hopper. Infected inflorescence should be destroyed.</i>
Livestock				
	Poultry	<ul style="list-style-type: none"> • Vanaraja, a dual purpose bird is suitable for backyard poultry farming due to its high production potential in terms of meat and egg than that of local/desi bird (low produces of meat and egg). It thrives well under low feeding and managemental practices due to its adaptability and local climatic conditions. • Srinidhi, a coloured bird of egg laying type, suitable for rural poultry farming. • Vaccinate the bird against Ranikhet disease 		
	Piggery	<ul style="list-style-type: none"> • Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. Keep floor dry to avoid skin diseases. • Do AI (Artificial Insemination) in sow for breeding purpose • Deworming of pig at every 6 month interval 		
	Fishery	<ul style="list-style-type: none"> • Rake the pond bottom and allow to dry. • Apply lime powder over dry surface of the pond bottom. • Clear jungle and do minor repairing of dyke. 		

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 12th to 16th April'17

Peren District

Bulletin No:27/2017

Weather summary of the preceding week

- Light rain occurred the past week
- Maximum and minimum temperatures ranged 26⁰C to 30⁰C and 13⁰C to 15⁰C, respectively.
- Relative humidity varied from 17% to 95%.
- Wind speed ranged from 1 to 2 kmph

Weather forecast valid upto 16th April'17

- Probability of no rain the coming week.
- **Max temp** is likely to be 30⁰C - 32⁰C and the **min temp** 18⁰C to 19⁰C
- **Sky is likely to be clear** the coming week
- **Relative Humidity** is likely to range from 22% to 79%.
- **Wind speed** may reach upto 2- 4 kmph
- **Wind direction** will be mostly easterly

Field crops

General Recommendations

- Short duration pulse crops and green manuring crops like dhaincha, sunnhemp etc should be planted as pre-kharif crop in fallow paddy lowland/ Terrace Rice field to enhance the soil fertility.
- Due to variable weather, farmers are advised to do constant monitoring against attack of pest and disease in vegetable crop, if symptom is observed then take protection measures as per recommendation when sky remain clear.

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
<i>Jhum paddy</i>			<i>Maize and pulses should be grown as strip crop in hill slopes</i>
<i>TRC/WRC paddy</i>			<i>Crop rotation should be adopted to break the cycle between insect pests or pathogen and host plant.</i>
<i>Summer maize</i>	Vegetative stage		<i>Use only good quality seeds.</i>
<i>Green gram</i>	Germination stage		<i>Proper earthing up should be carried out.</i>

Horticultural crop

<i>Mandarin</i>			<ul style="list-style-type: none"> • <i>During this season, single spray of bavistin (0.1%) should be done</i> • <i>After 15 days spray the bordeaux mixture (1%)</i>
<i>Okra</i>	Germination stage		<ul style="list-style-type: none"> • <i>Grow maize on borders as a barrier to prevent the entry of shoot & fruit borer adults</i> • <i>Timely remove and destroy the alternate weed hosts near the surrounding</i>

			<i>field</i>
Potato	Flowering stage		<ul style="list-style-type: none"> • <i>Light hoeing/ earthing up should be done for 40-45 days old plant.</i>
		Potato aphids	<ul style="list-style-type: none"> • <i>Check for potato aphids which transmits potato leaf curl virus. Aphids pierce veins, stems, growing tips, and blossoms with their needle-like mouthparts. As a result, blossoms shed and yield is reduced. New growth becomes stunted and curled. Heavily infested plants turn brown and die from the top down. Aphids tend to spread rapidly from field to field</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the affected plant/parts and regular monitoring of field for disease should be done.</i> • <i>Provide proper earthing up (15cm height) to reduce the infection of tubers.</i>
Cucurbits	Sowing stage		<ul style="list-style-type: none"> • <i>In present weather condition, start sowing of cucurbits crops. Direct sowing can be done.</i> • <i>Seed should be treated with captan/Thiram @ 2 gm/kg of seed before sowing. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i> • <i>Spray ethrel (plant growth regulator) @0.2 ml in 1 lt of water at 2 true leaf stage and second spray at 4 true leaf stage to increase the number of fruits.</i>
Summer vegetables	Germination stage		<ul style="list-style-type: none"> • <i>For spring summer vegetables, the young seedlings should be taken care properly. Monitor the field for damping off and other fungal disease. Take proper measures.</i>
Tomato	Maturity to harvesting stage		<ul style="list-style-type: none"> • <i>Harvest during morning hours when the temperature is low.</i> • <i>For distant market, harvest at green mature stage. For local market, harvest at pink stage or ripe stage.</i>
		Borer	<ul style="list-style-type: none"> • <i>Installed bird perches in tomato crop to control fruit borer insect. Handpicking of damaged fruit and burying are advised.</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the disease infected plant parts and fruits. Regular monitoring of disease should be done.</i> • <i>Staking of plant reduces the disease incidence</i>
Brinjal	Transplanting stage		<ul style="list-style-type: none"> • <i>Transplanting of young seedlings of brinjal may be done in prepared fields. Seed treatment should be done. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i>

	<i>Naga king chilli</i>	Transplanting stage	Damping off	<i>February sown king chilli may be transplanted in the field at 90-100cm spacing. Well decomposed FYM/vermicompost or other locally available manures should be applied.</i>
	<i>Fruit trees</i>			<i>Pits for fruit plantations should be ready for May - June planting (1x1x1) m3 pit size.</i>
	<i>Mango</i>		Mango hopper	<i>In mango orchard, farmers are advised for monitoring the mango hopper. Infected inflorescence should be destroyed.</i>
	<i>Livestock</i>			
	<i>Poultry</i>	<ul style="list-style-type: none"> • Vanaraja, a dual purpose bird is suitable for backyard poultry farming due to its high production potential in terms of meat and egg than that of local/desi bird (low produces of meat and egg). It thrives well under low feeding and managemental practices due to its adaptability and local climatic conditions. • Srinidhi, a coloured bird of egg laying type, suitable for rural poultry farming. • Vaccinate the bird against Ranikhet disease 		
	<i>Piggery</i>	<ul style="list-style-type: none"> • Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. Keep floor dry to avoid skin diseases. • Do AI (Artificial Insemination) in sow for breeding purpose • Deworming of pig at every 6 month interval 		
	<i>Fishery</i>	<ul style="list-style-type: none"> • Rake the pond bottom and allow to dry. • Apply lime powder over dry surface of the pond bottom. • Clear jungle and do minor repairing of dyke. 		

SCIENTIFIC EXPERT COMMITTEE

Sl.no	Name	Designation	Department	
1	Dr.D.J. Rajkhowa	Principle Scientist	Agronomy	djrakhowa@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 12th to 16th April'17

Phek District

Bulletin No:27/2017

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

<i>Weather summary of the preceding week</i>		<i>Weather forecast valid upto 16th April'17</i>	
<ul style="list-style-type: none"> ▪ Light rain occurred the past week ▪ Maximum and minimum temperatures ranged 25⁰C to 29⁰C and 11⁰C to 13⁰C, respectively. ▪ Relative humidity varied from 17% to 95%. ▪ Wind speed ranged from 1 to 2 kmph 		<ul style="list-style-type: none"> ▪ Probability of no rain the coming week. ▪ Max temp is likely to be 30⁰C - 31⁰C and the min temp 16⁰C to 19⁰C ▪ Sky is likely to be clear the coming week ▪ Relative Humidity is likely to range from 15% to 81%. ▪ Wind speed may reach upto 2- 3 kmph ▪ Wind direction will be mostly southerly 	
Field crops			
General Recommendations			
<ul style="list-style-type: none"> • Short duration pulse crops and green manuring crops like dhaincha, sunnhemp etc should be planted as pre-kharif crop in fallow paddy lowland/ Terrace Rice field to enhance the soil fertility. • Due to variable weather, farmers are advised to do constant monitoring against attack of pest and disease in vegetable crop, if symptom is observed then take protection measures as per recommendation when sky remain clear. 			
Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
<i>Jhum paddy</i>			<i>Maize and pulses should be grown as strip crop in hill slopes</i>
<i>TRC/WRC paddy</i>			<i>Crop rotation should be adopted to break the cycle between insect pests or pathogen and host plant.</i>
<i>Summer maize</i>	Vegetative stage		<i>Use only good quality seeds.</i>
<i>Green gram</i>	Germination stage		<i>Proper earthing up should be carried out.</i>
Horticultural crop			
<i>Mandarin</i>			<ul style="list-style-type: none"> • <i>During this season, single spray of bavistin (0.1%) should be done</i> • <i>After 15 days spray the bordeaux mixture (1%)</i>

Okra	Germination stage		<p>Grow maize on borders as a barrier to prevent the entry of shoot & fruit borer adults</p> <p>Timely remove and destroy the alternate weed hosts near the surrounding field</p>
Potato	Flowering stage		<ul style="list-style-type: none"> Light hoeing/ earthing up should be done for 40-45 days old plant.
		Potato aphids	<p>Check for potato aphids which transmits potato leaf curl virus. Aphids pierce veins, stems, growing tips, and blossoms with their needle-like mouthparts. As a result, blossoms shed and yield is reduced. New growth becomes stunted and curled. Heavily infested plants turn brown and die from the top down. Aphids tend to spread rapidly from field to field</p>
		Early blight and late blight	<ul style="list-style-type: none"> Remove the affected plant/parts and regular monitoring of field for disease should be done. Provide proper earthing up (15cm height) to reduce the infection of tubers.
Cucurbits	Sowing stage		<ul style="list-style-type: none"> In present weather condition, start sowing of cucurbits crops. Direct sowing can be done. Seed should be treated with captan/Thiram @ 2 gm/kg of seed before sowing. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing. Spray ethrel (plant growth regulator) @0.2 ml in 1 lt of water at 2 true leaf stage and second spray at 4 true leaf stage to increase the number of fruits.
Summer vegetables	Germination stage		<ul style="list-style-type: none"> For spring summer vegetables, the young seedlings should be taken care properly. Monitor the field for damping off and other fungal disease. Take proper measures
Tomato	Maturity to harvesting stage		<ul style="list-style-type: none"> Harvest during morning hours when the temperature is low. For distant market, harvest at green mature stage. For local market, harvest at pink stage or ripe stage.
		Borer	<ul style="list-style-type: none"> Installed bird perches in tomato crop to control fruit borer insect. Handpicking of damaged fruit and burying are advised.
		Early blight and late blight	<ul style="list-style-type: none"> Remove the disease infected plant parts and fruits. Regular monitoring of disease should be done. Staking of plant reduces the disease incidence
Brinjal	Transplanting stage		<ul style="list-style-type: none"> Transplanting of young seedlings of brinjal may be done in prepared fields. Seed treatment should be done. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.
Naga king chilli	Transplanting stage	Damping off	<p>February sown king chilli may be transplanted in the field at 90-100cm spacing. Well decomposed FYM/vermicompost or other locally available manures should be applied.</p>

	Fruit trees			<i>Pits for fruit plantations should be ready for May - June planting (1x1x1) m3 pit size.</i>
	Mango		Mango hopper	<i>In mango orchard, farmers are advised for monitoring the mango hopper. Infected inflorescence should be destroyed.</i>
Livestock				
	Poultry	<ul style="list-style-type: none"> • Vanaraja, a dual purpose bird is suitable for backyard poultry farming due to its high production potential in terms of meat and egg than that of local/desi bird (low produces of meat and egg). It thrives well under low feeding and managerial practices due to its adaptability and local climatic conditions. • Srinidhi, a coloured bird of egg laying type, suitable for rural poultry farming. • Vaccinate the bird against Ranikhet disease 		
	Piggery	<ul style="list-style-type: none"> • Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. Keep floor dry to avoid skin diseases. • Do AI (Artificial Insemination) in sow for breeding purpose • Deworming of pig at every 6 month interval 		
	Fishery	<ul style="list-style-type: none"> • Rake the pond bottom and allow to dry. • Apply lime powder over dry surface of the pond bottom. • Clear jungle and do minor repairing of dyke. 		

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 &	azezeseyie@yahoo.com

			Aromatic Plants	
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 12th to 16th April'17 Tuensang District

Bulletin No:27/2017

Weather summary of the preceding week

- Light rain occurred the past week
- Maximum and minimum temperatures ranged 25⁰C to 27⁰C and 12⁰C to 14⁰C, respectively.
- Relative humidity varied from 29% to 91%.
- Wind speed ranged from 1 to 2 kmph

Weather forecast valid upto 16th April'17

- Probability of no rain the coming week.
- **Max temp** is likely to be 30⁰C - 31⁰C and the **min temp** 15⁰C to 19⁰C
- **Sky is likely to be clear** the coming week
- **Relative Humidity** is likely to range from 15% to 71%.
- **Wind speed** may reach upto 1 - 2 kmph
- **Wind direction** will be mostly southerly

Field crops

General Recommendations

- Short duration pulse crops and green manuring crops like dhaincha, sunnhemp etc should be planted as pre-kharif crop in fallow paddy lowland/ Terrace Rice field to enhance the soil fertility.
- Due to variable weather, farmers are advised to do constant monitoring against attack of pest and disease in vegetable crop, if symptom is observed then take protection measures as per recommendation when sky remain clear.

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
<i>Jhum paddy</i>			<i>Maize and pulses should be grown as strip crop in hill slopes</i>
<i>TRC/WRC paddy</i>			<i>Crop rotation should be adopted to break the cycle between insect pests or pathogen and host plant.</i>
<i>Summer maize</i>	Vegetative stage		<i>Use only good quality seeds.</i>
<i>Green gram</i>	Germination stage		<i>Proper earthing up should be carried out.</i>

Horticultural crop

<i>Mandarin</i>			<ul style="list-style-type: none"> • During this season, single spray of bavistin (0.1%) should be done • After 15 days spray the bordeaux mixture (1%)
<i>Okra</i>	Germination stage		<p><i>Grow maize on borders as a barrier to prevent the entry of shoot & fruit borer adults</i></p> <p><i>Timely remove and destroy the alternate weed hosts near the surrounding</i></p>

			<i>field</i>
Potato	Flowering stage		<ul style="list-style-type: none"> • <i>Light hoeing/ earthing up should be done for 40-45 days old plant.</i>
		Potato aphids	<i>Check for potato aphids which transmits potato leaf curl virus. Aphids pierce veins, stems, growing tips, and blossoms with their needle-like mouthparts. As a result, blossoms shed and yield is reduced. New growth becomes stunted and curled. Heavily infested plants turn brown and die from the top down. Aphids tend to spread rapidly from field to field</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the affected plant/parts and regular monitoring of field for disease should be done.</i> • <i>Provide proper earthing up (15cm height) to reduce the infection of tubers.</i>
Cucurbits	Sowing stage		<ul style="list-style-type: none"> • <i>In present weather condition, start sowing of cucurbits crops. Direct sowing can be done.</i> • <i>Seed should be treated with captan/Thiram @ 2 gm/kg of seed before sowing. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i> • <i>Spray ethrel (plant growth regulator) @0.2 ml in 1 lt of water at 2 true leaf stage and second spray at 4 true leaf stage to increase the number of fruits.</i>
Summer vegetables	Germination stage		<ul style="list-style-type: none"> • <i>For spring summer vegetables, the young seedlings should be taken care properly. Monitor the field for damping off and other fungal disease. Take proper measures.</i>
Tomato	Maturity to harvesting stage		<ul style="list-style-type: none"> • <i>Harvest during morning hours when the temperature is low.</i> • <i>For distant market, harvest at green mature stage. For local market, harvest at pink stage or ripe stage.</i>
		Borer	<ul style="list-style-type: none"> • <i>Installed bird perches in tomato crop to control fruit borer insect. Handpicking of damaged fruit and burying are advised.</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the disease infected plant parts and fruits. Regular monitoring of disease should be done.</i> <p><i>Staking of plant reduces the disease incidence</i></p>
Brinjal	Transplanting stage		<ul style="list-style-type: none"> • <i>Transplanting of young seedlings of brinjal may be done in prepared fields. Seed treatment should be done. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i>
Naga king chilli	Transplanting stage	Damping off	<i>February sown king chilli may be transplanted in the field at 90-100cm spacing. Well decomposed FYM/vermicompost or other locally available</i>

				<i>manures should be applied.</i>
	Fruit trees			<i>Pits for fruit plantations should be ready for May - June planting (1x1x1) m³ pit size.</i>
	Mango		Mango hopper	<i>In mango orchard, farmers are advised for monitoring the mango hopper. Infected inflorescence should be destroyed.</i>
	Livestock			
	Poultry	<ul style="list-style-type: none"> • Vanaraja, a dual purpose bird is suitable for backyard poultry farming due to its high production potential in terms of meat and egg than that of local/desi bird (low produces of meat and egg). It thrives well under low feeding and managerial practices due to its adaptability and local climatic conditions. • Srinidhi, a coloured bird of egg laying type, suitable for rural poultry farming. • Vaccinate the bird against Ranikhet disease 		
Piggery	<ul style="list-style-type: none"> • Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. Keep floor dry to avoid skin diseases. • Do AI (Artificial Insemination) in sow for breeding purpose • Deworming of pig at every 6 month interval 			
Fishery	<ul style="list-style-type: none"> • Rake the pond bottom and allow to dry. • Apply lime powder over dry surface of the pond bottom. • Clear jungle and do minor repairing of dyke. 			



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 12th to 16th April'17

Wokha District

Bulletin No:27/2017

Weather summary of the preceding week

- Light rain occurred the past week
- Maximum and minimum temperatures ranged 25^oC to 27^oC and 11^oC to 12^oC, respectively.
- Relative humidity varied from 16% to 94%.
- Wind speed ranged from 2 to 4 kmph

Weather forecast valid upto 16th April'17

- Probability of no rain the coming week.
- **Max temp** is likely to be 30^oC - 31^oC and the **min temp** 16^oC to 20^oC
- **Sky is likely to be clear** the coming week
- **Relative Humidity** is likely to range from 17% to 79%.
- **Wind speed** may reach upto 2- 4 kmph
- **Wind direction** will be mostly southeasterly

Field crops

General Recommendations

- Short duration pulse crops and green manuring crops like dhaincha, sunnhemp etc should be planted as pre-kharif crop in fallow paddy lowland/ Terrace Rice field to enhance the soil fertility.
- Due to variable weather, farmers are advised to do constant monitoring against attack of pest and disease in vegetable crop, if symptom is observed then take protection measures as per recommendation when sky remain clear.

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
<i>Jhum paddy</i>			<i>Maize and pulses should be grown as strip crop in hill slopes</i>
<i>TRC/WRC paddy</i>			<i>Crop rotation should be adopted to break the cycle between insect pests or pathogen and host plant.</i>
<i>Summer maize</i>	Vegetative stage		<i>Use only good quality seeds.</i>
<i>Green gram</i>	Germination stage		<i>Proper earthing up should be carried out.</i>

Horticultural crop

<i>Mandarin</i>			<ul style="list-style-type: none"> • During this season, single spray of bavistin (0.1%) should be done • After 15 days spray the bordeaux mixture (1%)
<i>Okra</i>	Germination stage		<p><i>Grow maize on borders as a barrier to prevent the entry of shoot & fruit borer adults</i></p> <p><i>Timely remove and destroy the alternate weed hosts near the surrounding field</i></p>

Potato	Flowering stage		<ul style="list-style-type: none"> • Light hoeing/ earthing up should be done for 40-45 days old plant.
		Potato aphids	<p>Check for potato aphids which transmits potato leaf curl virus. Aphids pierce veins, stems, growing tips, and blossoms with their needle-like mouthparts. As a result, blossoms shed and yield is reduced. New growth becomes stunted and curled. Heavily infested plants turn brown and die from the top down. Aphids tend to spread rapidly from field to field</p>
		Early blight and late blight	<ul style="list-style-type: none"> • Remove the affected plant/parts and regular monitoring of field for disease should be done. • Provide proper earthing up (15cm height) to reduce the infection of tubers.
Cucurbits	Sowing stage		<ul style="list-style-type: none"> • In present weather condition, start sowing of cucurbits crops. Direct sowing can be done. • Seed should be treated with captan/Thiram @ 2 gm/kg of seed before sowing. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing. • Spray ethrel (plant growth regulator) @0.2 ml in 1 lt of water at 2 true leaf stage and second spray at 4 true leaf stage to increase the number of fruits.
Summer vegetables	Germination stage		<ul style="list-style-type: none"> • For spring summer vegetables, the young seedlings should be taken care properly. Monitor the field for damping off and other fungal disease. Take proper measures.
Tomato	Maturity to harvesting stage		<ul style="list-style-type: none"> • Harvest during morning hours when the temperature is low. • For distant market, harvest at green mature stage. For local market, harvest at pink stage or ripe stage.
		Borer	<ul style="list-style-type: none"> • Installed bird perches in tomato crop to control fruit borer insect. Handpicking of damaged fruit and burying are advised.
		Early blight and late blight	<ul style="list-style-type: none"> • Remove the disease infected plant parts and fruits. Regular monitoring of disease should be done. • Staking of plant reduces the disease incidence
Brinjal	Transplanting stage		<ul style="list-style-type: none"> • Transplanting of young seedlings of brinjal may be done in prepared fields. Seed treatment should be done. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.
Naga king chilli	Transplanting stage	Damping off	<p>February sown king chilli may be transplanted in the field at 90-100cm spacing. Well decomposed FYM/vermicompost or other locally available manures should be applied.</p>

	Fruit trees			<i>Pits for fruit plantations should be ready for May - June planting (1x1x1) m³ pit size.</i>
	Mango		Mango hopper	<i>In mango orchard, farmers are advised for monitoring the mango hopper. Infected inflorescence should be destroyed.</i>
	Livestock			
	Poultry	<ul style="list-style-type: none"> • Vanaraja, a dual purpose bird is suitable for backyard poultry farming due to its high production potential in terms of meat and egg than that of local/desi bird (low produces of meat and egg). It thrives well under low feeding and managemental practices due to its adaptability and local climatic conditions. • Srinidhi, a coloured bird of egg laying type, suitable for rural poultry farming. • Vaccinate the bird against Ranikhet disease 		
	Piggery	<ul style="list-style-type: none"> • Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. Keep floor dry to avoid skin diseases. • Do AI (Artificial Insemination) in sow for breeding purpose • Deworming of pig at every 6 month interval 		
	Fishery	<ul style="list-style-type: none"> • Rake the pond bottom and allow to dry. • Apply lime powder over dry surface of the pond bottom. • Clear jungle and do minor repairing of dyke. 		

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



--	--



भारत कृषि अनुसंधान संस्थान
ICAR - RCNEH

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

Integrated Agromet Advisory Service Bulletin from 12th to 16th April'17 Zunheboto District

Bulletin No:27/2017

<i>Weather summary of the preceding week</i>		<i>Weather forecast valid upto 16th April'17</i>	
<ul style="list-style-type: none"> Light rain occurred the past week Maximum and minimum temperatures ranged 24^oC to 27^oC and 11^oC to 13^oC, respectively. Relative humidity varied from 29% to 93%. Wind speed ranged from 1 to 2 kmph 		<ul style="list-style-type: none"> Probability of no rain the coming week. Max temp is likely to be 30^oC - 31^oC and the min temp 16^oC to 19^oC Sky is likely to be clear the coming week Relative Humidity is likely to range from 16% to 83%. Wind speed may reach upto 1- 2 kmph Wind direction will be mostly southeasterly 	
Field crops			
General Recommendations			
<ul style="list-style-type: none"> Short duration pulse crops and green manuring crops like dhaincha, sunnhemp etc should be planted as pre-kharif crop in fallow paddy lowland/ Terrace Rice field to enhance the soil fertility. Due to variable weather, farmers are advised to do constant monitoring against attack of pest and disease in vegetable crop, if symptom is observed then take protection measures as per recommendation when sky remain clear. 			
Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
<i>Jhum paddy</i>			<i>Maize and pulses should be grown as strip crop in hill slopes</i>
<i>TRC/WRC paddy</i>			<i>Crop rotation should be adopted to break the cycle between insect pests or pathogen and host plant.</i>
<i>Summer maize</i>	Vegetative stage		<i>Use only good quality seeds.</i>
<i>Green gram</i>	Germination stage		<i>Proper earthing up should be carried out.</i>
Horticultural crop			
<i>Mandarin</i>			<ul style="list-style-type: none"> During this season, single spray of bavistin (0.1%) should be done After 15 days spray the bordeaux mixture (1%)
<i>Okra</i>	Germination stage		<ul style="list-style-type: none"> Grow maize on borders as a barrier to prevent the entry of shoot & fruit borer adults Timely remove and destroy the alternate weed hosts near the surrounding

			<i>field</i>
Potato	Flowering stage		<ul style="list-style-type: none"> • <i>Light hoeing/ earthing up should be done for 40-45 days old plant.</i>
		Potato aphids	<ul style="list-style-type: none"> • <i>Check for potato aphids which transmits potato leaf curl virus. Aphids pierce veins, stems, growing tips, and blossoms with their needle-like mouthparts. As a result, blossoms shed and yield is reduced. New growth becomes stunted and curled. Heavily infested plants turn brown and die from the top down. Aphids tend to spread rapidly from field to field</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the affected plant/parts and regular monitoring of field for disease should be done.</i> • <i>Provide proper earthing up (15cm height) to reduce the infection of tubers.</i>
Cucurbits	Sowing stage		<ul style="list-style-type: none"> • <i>In present weather condition, start sowing of cucurbits crops. Direct sowing can be done.</i> • <i>Seed should be treated with captan/Thiram @ 2 gm/kg of seed before sowing. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i> • <i>Spray ethrel (plant growth regulator) @0.2 ml in 1 lt of water at 2 true leaf stage and second spray at 4 true leaf stage to increase the number of fruits.</i>
Summer vegetables	Germination stage		<ul style="list-style-type: none"> • <i>For spring summer vegetables, the young seedlings should be taken care properly. Monitor the field for damping off and other fungal disease. Take proper measures.</i>
Tomato	Maturity to harvesting stage		<ul style="list-style-type: none"> • <i>Harvest during morning hours when the temperature is low.</i> • <i>For distant market, harvest at green mature stage. For local market, harvest at pink stage or ripe stage.</i>
		Borer	<ul style="list-style-type: none"> • <i>Installed bird perches in tomato crop to control fruit borer insect. Handpicking of damaged fruit and burying are advised.</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the disease infected plant parts and fruits. Regular monitoring of disease should be done.</i> • <i>Staking of plant reduces the disease incidence</i>
Brinjal	Transplanting stage		<ul style="list-style-type: none"> • <i>Transplanting of young seedlings of brinjal may be done in prepared fields. Seed treatment should be done. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i>
Naga king	Transplanting	Damping off	<i>February sown king chilli may be transplanted in the field at 90-100cm</i>

	<i>chilli</i>	stage		<i>spacing. Well decomposed FYM/vermicompost or other locally available manures should be applied.</i>
	<i>Fruit trees</i>			<i>Pits for fruit plantations should be ready for May - June planting (1x1x1) m3 pit size.</i>
	<i>Mango</i>		Mango hopper	<i>In mango orchard, farmers are advised for monitoring the mango hopper. Infected inflorescence should be destroyed.</i>
	<i>Livestock</i>			
	<i>Poultry</i>	<ul style="list-style-type: none"> • Vanaraja, a dual purpose bird is suitable for backyard poultry farming due to its high production potential in terms of meat and egg than that of local/desi bird (low produces of meat and egg). It thrives well under low feeding and managerial practices due to its adaptability and local climatic conditions. • Srinidhi, a coloured bird of egg laying type, suitable for rural poultry farming. • Vaccinate the bird against Ranikhet disease 		
<i>Piggery</i>	<ul style="list-style-type: none"> • Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. Keep floor dry to avoid skin diseases. • Do AI (Artificial Insemination) in sow for breeding purpose • Deworming of pig at every 6 month interval 			
 <i>Fishery</i>	<ul style="list-style-type: none"> • Rake the pond bottom and allow to dry. • Apply lime powder over dry surface of the pond bottom. • Clear jungle and do minor repairing of dyke. 			

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 12th to 16th April'17 Dimapur District

Bulletin No:27/2017

Weather summary of the preceding week

- Light rain occurred the past week
- Maximum and minimum temperatures ranged 26^oC to 27^oC and 12^oC to 15^oC, respectively.
- Relative humidity varied from 17% to 94%.
- Wind speed ranged from 3 to 4 kmph

Weather forecast valid upto 16th April'17

- Probability of no rain the coming week.
- **Max temp** is likely to be 30^oC - 32^oC and the **min temp** 17^oC to 20^oC
- **Sky is likely to be clear** the coming week
- **Relative Humidity** is likely to range from 19% to 75%.
- **Wind speed** may reach upto 2- 4 kmph
Wind direction will be mostly southeasterly

Field crops

General Recommendations

- Proper drainage should be maintained in the field, proper weeding and earthing up should be carried out.
- Due to variable weather, farmers are advised to do constant monitoring against attack of pest and disease in vegetable crop, if symptom is observed then take protection measures as per recommendation when sky remain clear.
- Land preparation for upland rice and sowing should be done.

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
<i>Jhum paddy</i>			<i>Maize and pulses should be grown as strip crop in hill slopes</i>
<i>TRC/WRC paddy</i>			<i>Crop rotation should be adopted to break the cycle between insect pests or pathogen and host plant.</i>
<i>Summer maize</i>	Vegetative stage		<i>Use only good quality seeds.</i>
<i>Green gram</i>	Germination stage		<i>Proper earthing up should be carried out.</i>

Horticultural crops

- Good drainage should be maintained in the field.
- In nursery, to avoid damping off, other soil borne diseases, root rot and wilt diseases sow the seeds in raised bed.
- Maintain proper sanitation –
 - ✓ Removal and burning of previous crop debris and infected plant parts.
 - ✓ Remove weeds at regular intervals.

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
------------	-------	-------------------	--------------------------------

	Mandarin			<ul style="list-style-type: none"> • During this season, single spray of bavistin (0.1%) should be done • After 15 days spray the bordeaux mixture (1%)
	Okra	Germination stage		<p>Grow maize on borders as a barrier to prevent the entry of shoot & fruit borer adults</p> <p>Timely remove and destroy the alternate weed hosts near the surrounding field</p>
	Potato	Flowering stage		<ul style="list-style-type: none"> • Light hoeing/ earthing up should be done for 40-45 days old plant.
Potato aphids			<ul style="list-style-type: none"> • Check for potato aphids which transmits potato leaf curl virus. Aphids pierce veins, stems, growing tips, and blossoms with their needle-like mouthparts. As a result, blossoms shed and yield is reduced. New growth becomes stunted and curled. Heavily infested plants turn brown and die from the top down. Aphids tend to spread rapidly from field to field 	
Early blight and late blight		<ul style="list-style-type: none"> • Remove the affected plant/parts and regular monitoring of field for disease should be done. • Provide proper earthing up (15cm height) to reduce the infection of tubers. 		
	Cucurbits	Sowing stage		<ul style="list-style-type: none"> • In present weather condition, start sowing of cucurbits crops. Direct sowing can be done. • Seed should be treated with captan/Thiram @ 2 gm/kg of seed before sowing. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing. • Spray ethrel (plant growth regulator) @0.2 ml in 1 lt of water at 2 true leaf stage and second spray at 4 true leaf stage to increase the number of fruits.
	Summer vegetables	Germination stage		<ul style="list-style-type: none"> • For spring summer vegetables, the young seedlings should be taken care properly. Monitor the field for damping off and other fungal disease. Take proper measures.
	Tomato	Maturity to harvesting stage		<ul style="list-style-type: none"> • Harvest during morning hours when the temperature is low. • For distant market, harvest at green mature stage. For local market, harvest at pink stage or ripe stage.
Borer			<ul style="list-style-type: none"> • Installed bird perches in tomato crop to control fruit borer insect. • Handpicking of damaged fruit and burying are advised. 	
Early blight and late blight			<ul style="list-style-type: none"> • Remove the disease infected plant parts and fruits. Regular monitoring of disease should be done. • Staking of plant reduces the disease incidence 	
	Brinjal	Transplanting stage		<ul style="list-style-type: none"> • Transplanting of young seedlings of brinjal may be done in prepared fields. Seed treatment should be done. Use well decomposed FYM 10-12 tonne/acre

				<i>in the field after ploughing.</i>
	<i>Naga king chilli</i>	Transplanting stage	Damping off	<i>February sown king chilli may be transplanted in the field at 90-100cm spacing. Well decomposed FYM/vermicompost or other locally available manures should be applied.</i>
	<i>Fruit trees</i>			<i>Pits for fruit plantations should be ready for May - June planting (1x1x1) m³ pit size.</i>
	<i>Mango</i>		Mango hopper	<i>In mango orchard, farmers are advised for monitoring the mango hopper. Infected inflorescence should be destroyed.</i>
<i>Livestock</i>				
	<i>Poultry</i>	<ul style="list-style-type: none"> • Vanaraja, a dual purpose bird is suitable for backyard poultry farming due to its high production potential in terms of meat and egg than that of local/desi bird (low produces of meat and egg). It thrives well under low feeding and managemental practices due to its adaptability and local climatic conditions. • Srinidhi, a coloured bird of egg laying type, suitable for rural poultry farming. • Vaccinate the bird against Ranikhet disease 		
	<i>Piggery</i>	<ul style="list-style-type: none"> • Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. Keep floor dry to avoid skin diseases. • Do AI (Artificial Insemination) in sow for breeding purpose • Deworming of pig at every 6 month interval 		
	<i>Fishery</i>	<ul style="list-style-type: none"> • Prepare the pond • Apply lime and organic manure in case of pond filled with water • Remove aquatic weeds if infested • Small ponds can be made ready for nursery rearing 		



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 12th to 16th April'17

Kiphire District

Bulletin No:27/2017

Weather summary of the preceding week

- Light rain occurred the past week
- Maximum and minimum temperatures ranged 25^oC to 27^oC and 11^oC to 14^oC, respectively.
- Relative humidity varied from 17% to 95%.
- Wind speed ranged from 1 to 2 kmph

Weather forecast valid upto 16th April'17

- Probability of no rain the coming week.
- **Max temp** is likely to be 30^oC - 31^oC and the **min temp** 16^oC to 19^oC
- **Sky is likely to be clear** the coming week
- **Relative Humidity** is likely to range from 15% to 84%.
- **Wind speed** may reach upto 1- 2 kmph
- **Wind direction** will be mostly southerly

Field crops

General Recommendations

- Short duration pulse crops and green manuring crops like dhaincha, sunnhemp etc should be planted as pre-kharif crop in fallow paddy lowland/ Terrace Rice field to enhance the soil fertility.
- Due to variable weather, farmers are advised to do constant monitoring against attack of pest and disease in vegetable crop, if symptom is observed then take protection measures as per recommendation when sky remain clear.

Main Crops	Stage	Pest/ Diseases	Agro-meteorological Advisories
<i>Jhum paddy</i>			<i>Maize and pulses should be grown as strip crop in hill slopes</i>
<i>TRC/WRC paddy</i>			<i>Crop rotation should be adopted to break the cycle between insect pests or pathogen and host plant.</i>
<i>Summer maize</i>	Vegetative stage		<i>Use only good quality seeds.</i>
<i>Green gram</i>	Germination stage		<i>Proper earthing up should be carried out.</i>

Horticultural crop

<i>Mandarin</i>			<ul style="list-style-type: none"> • <i>During this season, single spray of bavistin (0.1%) should be done</i> • <i>After 15 days spray the bordeaux mixture (1%)</i>
<i>Okra</i>	Germination stage		<ul style="list-style-type: none"> • <i>Grow maize on borders as a barrier to prevent the entry of shoot & fruit borer adults</i> • <i>Timely remove and destroy the alternate weed hosts near the surrounding field</i>
<i>Potato</i>	Flowering stage		<ul style="list-style-type: none"> • <i>Light hoeing/ earthing up should be done for 40-45 days old plant.</i>
		Potato	<ul style="list-style-type: none"> • <i>Check for potato aphids which transmits potato leaf curl virus. Aphids pierce</i>

		aphids	<i>veins, stems, growing tips, and blossoms with their needle-like mouthparts. As a result, blossoms shed and yield is reduced. New growth becomes stunted and curled. Heavily infested plants turn brown and die from the top down. Aphids tend to spread rapidly from field to field</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the affected plant/parts and regular monitoring of field for disease should be done.</i> • <i>Provide proper earthing up (15cm height) to reduce the infection of tubers.</i>
<i>Cucurbits</i>	Sowing stage		<ul style="list-style-type: none"> • <i>In present weather condition, start sowing of cucurbits crops. Direct sowing can be done.</i> • <i>Seed should be treated with captan/Thiram @ 2 gm/kg of seed before sowing. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i> • <i>Spray ethrel (plant growth regulator) @0.2 ml in 1 lt of water at 2 true leaf stage and second spray at 4 true leaf stage to increase the number of fruits.</i>
<i>Summer vegetables</i>	Germination stage		<ul style="list-style-type: none"> • <i>For spring summer vegetables, the young seedlings should be taken care properly. Monitor the field for damping off and other fungal disease. Take proper measures.</i>
<i>Tomato</i>	Maturity to harvesting stage		<ul style="list-style-type: none"> • <i>Harvest during morning hours when the temperature is low.</i> • <i>For distant market, harvest at green mature stage. For local market, harvest at pink stage or ripe stage.</i>
		Borer	<ul style="list-style-type: none"> • <i>Installed bird perches in tomato crop to control fruit borer insect. Handpicking of damaged fruit and burying are advised.</i>
		Early blight and late blight	<ul style="list-style-type: none"> • <i>Remove the disease infected plant parts and fruits. Regular monitoring of disease should be done.</i> • <i>Staking of plant reduces the disease incidence</i>
<i>Brinjal</i>	Transplanting stage		<ul style="list-style-type: none"> • <i>Transplanting of young seedlings of brinjal may be done in prepared fields. Seed treatment should be done. Use well decomposed FYM 10-12 tonne/acre in the field after ploughing.</i>
<i>Naga king chilli</i>	Transplanting stage	Damping off	<i>February sown king chilli may be transplanted in the field at 90-100cm spacing. Well decomposed FYM/vermicompost or other locally available manures should be applied.</i>
<i>Fruit trees</i>			<i>Pits for fruit plantations should be ready for May - June planting (1x1x1) m3 pit size.</i>
<i>Mango</i>		Mango hopper	<i>In mango orchard, farmers are advised for monitoring the mango hopper. Infected inflorescence should be destroyed.</i>

Livestock

Poultry

- **Vanaraja**, a dual purpose bird is suitable for backyard poultry farming due to its high production potential in terms of meat and egg than that of local/desi bird (low produces of meat and egg). It thrives well under low feeding and managemental practices due to its adaptability and local climatic conditions.
- **Srinidhi**, a coloured bird of egg laying type, suitable for rural poultry farming.
- Vaccinate the bird against Ranikhet disease

Piggery

- Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. Keep floor dry to avoid skin diseases.
- Do AI (Artificial Insemination) in sow for breeding purpose
- Deworming of pig at every 6 month interval

Fishery

- Rake the pond bottom and allow to dry.
- Apply lime powder over dry surface of the pond bottom.
- Clear jungle and do minor repairing of dyke.



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