

#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Dated: 19th September, 2014

(7.33)

strict: Kolasib Period: 20-24 September, 2014

Bulletin No: -451/2014/ Bulletin/English

|                   | 1000          | E.            | ( )           |               |               |
|-------------------|---------------|---------------|---------------|---------------|---------------|
| Parameters        | 20-09-2014    | 21-09-2014    | 22-09-2014    | 23-09-2014    | 24-09-2014    |
| Rainfall (mm)     | 9             | 4             | 3             | 6             | 8             |
| Max Temp (oC)     | 27            | 27            | 31_           | 30            | 30            |
| Min Temp (oC)     | 22            | 20            | 21            | 21            | 21            |
| Cloud Coverage    | Mainly cloudy |
| Max RH (%)        | 100           | 98            | 99            | 99            | 99            |
| Min RH (%)        | 92            | 85            | 67            | 65            | 68            |
| Wind Speed (KmpH) | 4             | 4             | 4             | 6             | 6             |
| Wind Direction    | S             | S-E           | S-E           | S-E           | S             |

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

**Mamit-376.0** mm Kolasib- 372.1mm Champhai- 329.7mm Aizawl-378.0mm (19.16)(-28.00)(-20.69)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-16.55)(-32.04)(-64.68)(-32.04)

### Weather summary of the past three days

The temperature range for maximum and minimum were 30.0-31.5°C and  $22.8-24.3^{\circ}$ C respectively. Mainly Cloudy weather was observed. Wind direction is northeasterly. Maximum RH observed 74-83% & minimum of 19-38%. Rainfall recorded for the past three days is 48.9 mm.

### Weather forecast valid from 20<sup>th</sup> September, 2014 To 24<sup>th</sup> September, 2014.

There is a chance of light rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 27-31°C and 20-22°C. Maximum relative humidity is expected in the range of 98-100% and minimum may from 65-92%. Wind direction would be southeasterly with the wind speed of 4-6 km per hour. Moderate cloudy weather will prevail during the next five days.

Weekly cumulative rainfall: 30.0mm

| Main Crop/ | Stage            | Cultural practices/ | Agricultural / Horticultural/ animal                   |
|------------|------------------|---------------------|--|
| Animal     |                  | Pest/ Diseases      | husbandry advisories                                   |
| /Fisheries |                  | F SAIHA             | \  |
| Khasi      | Vegetative stage | <b>Can</b> ker      | <ul> <li>Prune the diseased and dead twigs.</li> </ul> |
| Mandarin   |                  |                     | • Wound dressing with Bordeaux paste and               |

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|           |   |               | mulch with dry grass to conserve moisture   |
|-----------|---|---------------|---|
|           |   |               | and suppress the growth of weed.  |
|           |   |               | • For canker, spray streoptomycin 2g +  |
|           |   | /             | copperoxycholoride 8 g /10 lt of water.   |
|           | 3 1                                     | 2             | • Excess water removes from the base of the   |
|           |   | KOLASIB       | plant.  |
| Banana    | Vegetative/                             | RULASIB >     | ✓ Remove water sucker, keep 1 or 2 plants in a  |
| Dununu    | harvesting                              | LA NA         | single place.   |
|           |   | 3 1           | ✓ Remove sword sucker and use it as new   |
|           | (                                       |               | planting material.  |
|           | 1                                       |               | ✓ Excess water removes from the base of the   |
|           | 1                                       |               | plant.  |
|           | 7 MAMIT                                 | (             | ✓ Fertilizer application in split dose of   |
|           | 5                                       | AIZAVIL       | recommended dose.   |
|           | \ \ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ | CHIEDLIF      | ✓ Harvest fruits when the flower tips of the  |
|           | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \   |               | fruit dehiscent.  |
| Pineapple | Vegetative stage                        | 3 8 6         | o Clean the vicinity of plants by weeding and   |
|           |   | 1 3 0         | loosen up the soil.   |
|           |   |               | o Remove slips and use it as a new planting   |
|           | 12                                      | armauu.       | material.   |
|           |   | SERCHH        | TT 8  |
|           | No.                                     | V 1-7         | 3g + Chloropyriphos @ 1 g/lt of water to  |
|           | )                                       |               | protect against soil borne disease and  |
|           |   | \ \frac{1}{2} | insect.  • Weeding and intercultural operation.   |
| Cucurbits | Vegetative stage                        | 000000000     | <ul><li>Weeding and intercultural operation.</li><li>Nursery raising for offseason cucurbits.</li></ul> |
| Cucuibits | vegetative stage                        | LUNGLEI       | 17/4/   |
|           | 1                                       | Damping off   | ✓ Seed treatment with thiram 3g/kg seed or  |
|           | 1                                       | W 82          | Trichoderma viride 4g+ metalaxyl 4g   |
|           |   |               | (Apron)/ kg seed  |
|           | 3                                       | ( Vai ex )    | Drenching 1% Bordeaux mixture or 2 g  |
|           | 1                                       |               | captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.                                 |
| Drinial   | Vegetative stage                        |               |   |
| Brinjal   | v egetative stage                       |               | <ul> <li>Weeding near the plant</li> <li>Fertilizer application in split dose of</li> </ul>             |
|           |   | LAWNGTLAN     | recommended dose  |
|           |   | # SAIHA       | <ul> <li>Draining of excess water and preparation</li> </ul>  |
|           |   |               | mound near the base.  |
|           |   | Disease:      | Seed treatment with captan, thiram or   |
|           | J                                       | 7 7           | T. T  |

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|                      |                  | Da <mark>m</mark> ping off-  | chlorothalonil will effectively control this   |
|----------------------|------------------|--|--|
|                      |                  |  | disease.   |
|                      |                  | Pest:  | <ul> <li>Sulfur fungicides can be used to control</li> </ul>                                       |
|                      | - 7              | Mites and hoppers-   | this pest.   |
| Cowpea               | Vegetative stage | 5  | Trilling into bower structure.   |
|                      | 27.              | KOLASIB  | Weeding near the plant   |
|                      | 5                | La S   | Draining of excess water and preparation mound near the base.                                      |
|                      | }                | Sca <mark>b and leaf blig</mark> ht<br>disease   | ✓ Use of resistant varieties.  |
| Early Cole crop      | Nursery stage    | Land preparation   | ✓ Nursery preparation for cabbage,   |
|                      |                  |  | cauliflower, broccoli and knolkhol.  |
|                      | 7 MAMIT          | 1  | Raised bed, nursery bed solarisation.  |
|                      | 8                | AIZAVVL 1  | Bed should be 1m width and   |
|                      |                  |  | conventional length.   |
|                      |                  | 3  | Application of FYM (1.5-2.0 kg/ m <sup>2</sup> )   |
|                      | -                | Domning off  | <ul><li>Line sowing of seeds (7-10cm)</li><li>✓ Seed treatment with thiram 3g/kg seed or</li></ul> |
|                      | ) &              | Damping off  | Trichoderma viride 4g+ metalaxyl 4g  |
|                      | 1.5              |  | (Apron)/ kg seed   |
|                      |                  | SERCHH   |  |
|                      |                  |  | captan or 3 copper oxychloride/ lt of water  |
|                      | (                | 1  | at 10-15 DAS are effective.  |
|                      |                  | Mustard sawfly   | ✓ Application of carbofuran 3G @100g/m² in   |
|                      |                  |  | nursery is quite effective.  |
| Ginger &<br>Turmeric | Vegetation stage | LUNGLEI  | ✓ Weeding in turmeric and ginger field.  |
|                      |                  | Leaf spot and leaf   | o Spraying Dithane M-45 @ 2.5g/litre of  |
|                      | 7                | blotch   | water or Bavistin @ 1g/litre of water, 2-3   |
|                      |                  |  | sprayings should be given forthnightly   |
|                      |                  | 1 7 00   | intervals.   |
|                      |                  | 1 63 9   | O Spraying of Blitox @ 3 g/l of water was  |
| Moi                  | Elemenic4        | The state of the s | found effective against leaf spot.   |
| Maize                | Flowering stage  | LAWNGTLAL  | <ul><li>✓ Weeding in maize plot</li><li>✓ Topdressing with urea fertilizer.</li></ul>              |
|                      |                  | Pest: SAIHA  |  |
|                      |                  | Corn earworm   | of the ear and any affected kernels. The rest  |
|                      |                  | Corn car worm  | of should be fine to eat.  |
|                      |                  | D 1  | or should be time to cat.  |

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|         |                 |   | - Crop rotation with leguminous crop.   |
|---------|-----------------|---|---|
|         | 57              | Birds   | - Reflecting tape poly propylene metallic<br>shine tape and the other silver that reflects<br>sunlight causing flashing effect is effective<br>in scaring birds.                                    |
| n.      |                 | KOLASIB   | - Automatic acetylene exploders or birds scaring gun that produce periodically loud noise have been suggested.  |
| Rice    | Flowering Stage | $\leftarrow 1$                                    | <ul><li>✓ One hand weed will require.</li><li>✓ Application of split dose of Urea.</li></ul>  |
|         | } MAMIT         | Rice Stem borer                                   | <ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>   |
|         |                 | Gundhi bug  | <ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the population reaches ETL of 1 nymph or adult/ hill.</li> </ul> |
|         | 1               | Leaf blast<br>SERCHHI                             | <ul> <li>Judicious application of nitrogenous fertilizer.</li> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>                       |
| Pig     | All stages      | Porcine Reproductive Respiratory Syndrome (PRRS). | 1. Culling of positive pigs or piglets.   |
|         | Adult stage     | Swine fever.                                      | 2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval  |
| Cattle  | All age group   | Foot and Mouth<br>Disease (FMD)                   | • FMD vaccine at 16 week and repeat every 6 month.  |
|         | Young stage     | Black Quarter (BQ)                                | <ul> <li>Black Quarter Vaccine (BQV).</li> <li>Primary vaccination 6 month or above</li> <li>Revaccination annually</li> </ul>  |
| Poultry | Adult stage     | Ranikhet Disease.                                 | • F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.   |
|         | Early stage     | Coccidiosis                                       | Amprolium or coccidiostat   |

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LAWNGTLAL

SAIHA

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Dated: 19th September, 2014

District: Chhimtuipui Period: 20-24 September, 2014

Bulletin No: -451/2014/ Bulletin/English

| Parameters        | 20-09-2014    | 21-09-2014    | 22-09-2014    | 23-09-2014   | 24-09-2014    |
|-------------------|---------------|---------------|---------------|--------------|---------------|
| Rainfall (mm)     | 11            | 0             | 3             | 11           | 25            |
| Max Temp (oC)     | 26            | 22            | 29            | 29           | 29            |
| Min Temp (oC)     | 20            | 19            | 19            | 19           | 19            |
| Cloud Coverage    | Mainly cloudy | Mainly cloudy | Mainly cloudy | Mainly clear | Mainly cloudy |
| Max RH (%)        | 100           | 94            | 95            | 100          | 100           |
| Min RH (%)        | 95            | 84            | 60            | 61           | 65            |
| Wind Speed (KmpH) | 5             | 6             | 4             | 4            | 4             |
| Wind Direction    | S-E           | S-E           | S-E           | S-E          | S-E           |

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

| Weather summary of the past |                  | Weather forecast valid from 20 <sup>th</sup> September, 2014 To 24 <sup>th</sup>  |  |  |
|-----------------------------|------------------|---|--|--|
| thre                        | ee days          |   | September, 2014.                                       |  |
|                             |                  | There is a chance of moderate to light rainfall during the next 4 day. The maximum and minimum temperatures for the next 5 days may range for 22-29°C and 19-20°C. Maximum relative humidity is expected in the range of 94-100% and minimum may from 60-95%. Wind direction would be southeasterly with the wind speed of 4-6 km per hour. Moderate cloudy weather will prevail during the next five days.  *Weekly cumulative rainfall: 51.0mm* |  |  |
| Main Crop/                  | Stage            | Cultural practices/   | Agricultural / Horticultural/ animal                   |  |
| Animal                      |                  | Pest/ Diseases  | husbandry advisories                                   |  |
| /Fisheries                  |                  | f SAIHA   |  |  |
| Khasi                       | Vegetative stage | <b>Can</b> ker  | <ul> <li>Prune the diseased and dead twigs.</li> </ul> |  |
| Mandarin                    |                  | 1   | • Wound dressing with Bordeaux paste and               |  |

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|            |                           |                                       | mulch with dry grass to conserve moisture                               |
|------------|---------------------------|---------------------------------------|---|
|            |                           |                                       | and suppress the growth of weed.  |
|            |                           |                                       | • For canker, spray streoptomycin 2g +                                  |
|            | 3 1                       | 1 3                                   | copperoxycholoride 8 g /10 lt of water.                                 |
|            |                           | V                                     | • Excess water removes from the base of the                             |
|            |                           | KOLASIB                               | plant.  |
| Banana     | Vegetative/<br>harvesting | La 9                                  | Remove water sucker, keep 1 or 2 plants in a single place.              |
|            | nai vesting               | 3 4 /                                 | ✓ Remove sword sucker and use it as new                                 |
|            | 7                         |                                       |   |
|            | 1                         | 2000                                  | planting material.  ✓ Excess water removes from the base of the         |
|            |                           |                                       |   |
|            | \$ MAMIT                  |                                       | plant.  ✓ Fertilizer application in split dose of                       |
|            | 2 1112/11/11              |                                       | recommended dose.   |
|            | 3                         | A AZAWL j                             | ✓ Harvest fruits when the flower tips of the                            |
|            |                           | 1                                     | fruit dehiscent.  |
| Pineapple  | Vegetative stage          | (                                     | <ul><li>Clean the vicinity of plants by weeding and</li></ul>           |
| Tilleapple | vegetative stage          |                                       | loosen up the soil.   |
|            | ) &                       |                                       | o Remove slips and use it as a new planting                             |
|            | 3.5                       |                                       | material.   |
|            |                           | SERCHI                                | Sucker dipping treatment with Bavistin @                                |
|            |                           |                                       | 3g + Chloropyriphos @ 1 g/lt of water to                                |
|            |                           |                                       | protect against soil borne disease and                                  |
|            |                           | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | insect.   |
|            | J                         |                                       | Weeding and intercultural operation.                                    |
| Cucurbits  | Vegetative stage          | LUNGLEI                               | Nursery raising for offseason cucurbits.                                |
|            |                           | SUPERSOLER SHILL                      |   |
|            | 1                         | Damping off                           | Seed treatment with thiram 3g/kg seed or                                |
|            | <b>\</b>                  | W 5 7                                 | Trichoderma viride 4g+ metalaxyl 4g                                     |
|            |                           | 134                                   | (Apron)/ kg seed  |
|            | 3                         | C C                                   | Drenching 1% Bordeaux mixture or 2 g                                    |
|            | 8                         |                                       | captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective. |
| Brinjal    | Vegetative stage          |                                       | ❖ Weeding near the plant  |
| Dilijai    | vegetative stage          |                                       | • Fertilizer application in split dose of                               |
|            |                           | LAWNGTLAL                             | recommended dose  |
|            |                           | / SAIH/                               | <ul> <li>Draining of excess water and preparation</li> </ul>            |
|            |                           |                                       | mound near the base.  |
|            |                           | Disease:                              | o Seed treatment with captan, thiram or                                 |
|            | 1                         | Discuse.                              | 5 5000 troutilent with captain, unrain of                               |

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|                      |                  | Da <mark>m</mark> ping off-                    | chlorothalonil will effectively control this   |
|----------------------|------------------|--|--|
|                      |                  |  | disease.   |
|                      |                  | Pest:  | <ul> <li>Sulfur fungicides can be used to control</li> </ul>   |
|                      | - \ \ \ \ \      | Mites and hoppers-                             | this pest.   |
| Cowpea               | Vegetative stage | KOLASIB  | <ul> <li>Trilling into bower structure.</li> <li>Weeding near the plant</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>  |
|                      | <b>\</b>         | Sca <mark>b and leaf blig</mark> ht<br>disease | ✓ Use of resistant varieties.  |
| Early Cole crop      | Nursery stage    | Land preparation                               | <ul> <li>✓ Nursery preparation for cabbage, cauliflower, broccoli and knolkhol.</li> <li>♣ Raised bed, nursery bed solarisation.</li> <li>♣ Bed should be 1m width and conventional length.</li> <li>♣ Application of FYM (1.5-2.0 kg/ m²)</li> <li>♣ Line sowing of seeds (7-10cm)</li> </ul> |
|                      |                  | Damping off SERCHH                             | captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.  |
|                      |                  | Mustard sawfly                                 | ✓ Application of carbofuran 3G @100g/m² in nursery is quite effective.   |
| Ginger &<br>Turmeric | Vegetation stage | LUNGLEI  | ✓ Weeding in turmeric and ginger field.  |
|                      |                  | Leaf spot and leaf<br>blotch                   | <ul> <li>Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.</li> <li>Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.</li> </ul>   |
| Maize                | Flowering stage  | LAWNGTLAL                                      | <ul><li>✓ Weeding in maize plot</li><li>✓ Topdressing with urea fertilizer.</li></ul>  |
|                      |                  | Pest: SAIHA Corn earworm                       |  |

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|         |                 |   | - Crop rotation with leguminous crop.   |
|---------|-----------------|---|---|
|         |                 | Birds   | - Reflecting tape poly propylene metallic   |
|         | 57              |   | shine tape and the other silver that reflects<br>sunlight causing flashing effect is effective<br>in scaring birds.   |
|         |                 | KOLASIB   | - Automatic acetylene exploders or birds scaring gun that produce periodically loud   |
|         | 1               | WA,   | noise have been suggested.  |
| Rice    | Flowering Stage |   | <ul><li>✓ One hand weed will require.</li><li>✓ Application of split dose of Urea.</li></ul>  |
|         | } MAMIT         | Rice Stem borer                                   | <ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>   |
|         |                 | Gundhi bug  | <ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the population reaches ETL of 1 nymph or adult/ hill.</li> </ul> |
|         | 2               | Leaf blast SERCHHI                                | <ul> <li>Judicious application of nitrogenous fertilizer.</li> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>                       |
| Pig     | All stages      | Porcine Reproductive Respiratory Syndrome (PRRS). | 1. Culling of positive pigs or piglets.   |
|         | Adult stage     | Swine fever.                                      | 2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval  |
| Cattle  | All age group   | Foot and Mouth<br>Disease (FMD)                   | • FMD vaccine at 16 week and repeat every 6 month.  |
|         | Young stage     | Black Quarter (BQ)                                | <ul> <li>Black Quarter Vaccine (BQV).</li> <li>Primary vaccination 6 month or above</li> <li>Revaccination annually</li> </ul>  |
| Poultry | Adult stage     | Ranikhet Disease.                                 | • F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.   |
|         | Early stage     | <b>Coccid</b> iosis                               | Amprolium or coccidiostat   |

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LAWNGTLAL

SAIHA

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#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Dated: 19th September, 2014

District: Champhai Period: 20-24 September, 2014

Bulletin No: -451/2014/ Bulletin/English

| Parameters        | 20-09-2014    | 21-09-2014    | 22-09-2014    | 23-09-2014    | 24-09-2014    |
|-------------------|---------------|---------------|---------------|---------------|---------------|
| Rainfall (mm)     | 10            | 0             | 0             | 0             | 3             |
| Max Temp (oC)     | 25            | 27            | 29            | 29            | 30            |
| Min Temp (oC)     | 20            | 19            | 19            | 19            | 19            |
| Cloud Coverage    | Mainly cloudy |
| Max RH (%)        | 100           | 93            | 100           | 99            | 99            |
| Min RH (%)        | 96            | 78            | 63            | 61            | 66            |
| Wind Speed (KmpH) | 3             | 4             | 4             | 4             | 4             |
| Wind Direction    | S-E           | S-E           | S             | S             | S             |

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

| Weather summary of the past |                  |       | Weather forecast valid from 20 <sup>th</sup> September, 2014 To 24 <sup>th</sup> |  |  |
|-----------------------------|------------------|-------|--|--|--|
| thre                        | e days           |       | September, 2014.   |  |  |
|                             |                  |       |  | There is a chance of moderate to light rainfall during the next 2 day. The maximum and minimum temperatures for the next 5 days may range for 25-30°C and 19-20°C. Maximum relative humidity is expected in the range of 93-100% and minimum may from 61-96%. Wind direction would be southeasterly with the wind speed of 3-4 km per hour. Dense cloudy sky weather will prevail during the next five days.  *Weekly cumulative rainfall: 13.0mm* |  |
| Main Crop/                  | Stage            |       | Cultural practices/  | Agricultural / Horticultural/ animal   |  |
| Animal                      | Suge             | 4     | Pest/ Diseases   | husbandry advisories   |  |
| /Fisheries                  |                  | 1     | SAIHA  | nusbandi y advisories  |  |
| Khasi                       | Vegetative stage | J.J.J | <b>Can</b> ker   | <ul> <li>Prune the diseased and dead twigs.</li> </ul>   |  |

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• Wound dressing with Bordeaux paste and

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Mandarin



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(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



|           |  |                         | mulch with dry grass to conserve moisture  |
|-----------|--|-------------------------|--|
|           |  | 1                       | and suppress the growth of weed.   |
|           |  |                         | • For canker, spray streoptomycin 2g + copperoxycholoride 8 g /10 lt of water.                             |
|           | 3 1  | 1                       | • Excess water removes from the base of the  |
|           |  | Variation 1             | plant.   |
| Banana    | Vegetative/  | KOLASIB                 | Remove water sucker, keep 1 or 2 plants in a   |
| Danana    | harvesting   | LA.                     | single place.  |
|           | nai vesting  | 3 1 /                   | ✓ Remove sword sucker and use it as new  |
|           | (  |                         | planting material.   |
|           | 1  |                         | ✓ Excess water removes from the base of the  |
|           | J  | / 3                     | plant.   |
|           | 7 MAMIT  |                         | ✓ Fertilizer application in split dose of  |
|           | 6  | 1.17.000                | recommended dose.  |
|           |  | AIZAVVL                 | ✓ Harvest fruits when the flower tips of the   |
|           | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \  | 1                       | fruit dehiscent.   |
| Pineapple | Vegetative stage   |                         | o Clean the vicinity of plants by weeding and  |
|           | \  | ( ) >0                  | loosen up the soil.  |
|           | 1  |                         | o Remove slips and use it as a new planting  |
|           | 12   |                         | material.  |
|           |  | SERCHI                  | Sucker dipping treatment with Bavistin @   |
|           |  | V 1-3                   | 3g + Chloropyriphos @ 1 g/lt of water to   |
|           | The state of the s | 5                       | protect against soil borne disease and   |
|           |  |                         | insect.  |
| Cucurbits | Vogototivo stago   |                         | <ul> <li>Weeding and intercultural operation.</li> <li>Nursery raising for offseason cucurbits.</li> </ul> |
| Cucurbits | Vegetative stage   | LUNGLEI                 |  |
|           | 1  | Damping off             | ✓ Seed treatment with thiram 3g/kg seed or   |
|           | L.   | ~ 8×                    | Trichoderma viride 4g+ metalaxyl 4g  |
|           | 3-11   |                         | (Apron)/ kg seed   |
|           |  | ( ) ( ) ( ) ( ) ( ) ( ) | Drenching 1% Bordeaux mixture or 2 g   |
|           |  | 8 1 5 7 3               | captan or 3 copper oxychloride/ lt of water  |
| D : 1 1   | <b>T</b> 7 4 4 • 4   |                         | at 10-15 DAS are effective.  |
| Brinjal   | Vegetative stage   |                         | Weeding near the plant   |
|           |  | LAWNGTLAN               | Fertilizer application in split dose of recommended dose.  |
|           |  | / SAIH                  | <ul> <li>Draining of excess water and preparation</li> </ul>   |
|           |  |                         | mound near the base.   |
|           |  | Disease:                | o Seed treatment with captan, thiram or  |
|           | 1  | Z.Seupe.                | 2 2500 troutilent with cuptain, till of  |

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|                      |                  | Da <mark>m</mark> ping off-                    | chlorothalonil will effectively control this   |
|----------------------|------------------|--|--|
|                      |                  |  | disease.   |
|                      |                  | Pest:  | <ul> <li>Sulfur fungicides can be used to control</li> </ul>   |
|                      | - \ \ \ \ \      | Mites and hoppers-                             | this pest.   |
| Cowpea               | Vegetative stage | KOLASIB  | <ul> <li>Trilling into bower structure.</li> <li>Weeding near the plant</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>  |
|                      | {                | Sca <mark>b and leaf blig</mark> ht<br>disease | ✓ Use of resistant varieties.  |
| Early Cole crop      | Nursery stage    | Land preparation                               | <ul> <li>✓ Nursery preparation for cabbage, cauliflower, broccoli and knolkhol.</li> <li>♣ Raised bed, nursery bed solarisation.</li> <li>♣ Bed should be 1m width and conventional length.</li> <li>♣ Application of FYM (1.5-2.0 kg/ m²)</li> <li>♣ Line sowing of seeds (7-10cm)</li> </ul> |
|                      |                  | Damping off SERCHH                             | captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.  |
|                      |                  | Mustard sawfly                                 | ✓ Application of carbofuran 3G @100g/m² in nursery is quite effective.   |
| Ginger &<br>Turmeric | Vegetation stage | LUNGLEI  | ✓ Weeding in turmeric and ginger field.  |
|                      |                  | Leaf spot and leaf<br>blotch                   | <ul> <li>Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.</li> <li>Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.</li> </ul>   |
| Maize                | Flowering stage  | LAWNGTLAN                                      | <ul><li>✓ Weeding in maize plot</li><li>✓ Topdressing with urea fertilizer.</li></ul>  |
|                      |                  | Pest: SAIHA<br>Corn earworm                    |  |

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#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



|         |                 |                    | - Crop rotation with leguminous crop.  |
|---------|-----------------|--------------------|--|
|         |                 | Birds              | - Reflecting tape poly propylene metallic  |
|         | 5               | 1                  | shine tape and the other silver that reflects<br>sunlight causing flashing effect is effective     |
|         | 1 1-2           | 5                  | in scaring birds.  |
|         |                 | KOLASIB            | - Automatic acetylene exploders or birds   |
|         | 1               |                    | scaring gun that produce periodically loud   |
|         | 1               | (A)                | noise have been suggested.   |
| Rice    | Flowering Stage |                    | ✓ One hand weed will require.  |
|         | 1               | STATE              | ✓ Application of split dose of Urea.   |
|         |                 | Rice Stem borer    | Destroy egg masses.  |
|         | 3 MAMIT         |                    | <ul> <li>Spraying of monocrotophos 20ml/10lt water<br/>or Imidacloprid 20ml/10lt water.</li> </ul> |
|         | 8               | Gundhi bug         | Spray monocrotophos 36 WSC @ 1.5 ml/lt   |
|         |                 | A                  | or endosulfan 35 EC @ 1.5 ml/ml  |
|         | )               | 1                  | • Insecticide application should be done if the  |
|         | 4               |                    | population reaches ETL of 1 nymph or   |
|         | ) &             | Leaf blast         | adult/ hill.  Judicious application of nitrogenous   |
|         | 1 5             | Lear brast         | Judicious application of nitrogenous fertilizer.   |
|         |                 | SERCHHI            |  |
|         |                 | V-7                | or edifenphos @ 1ml/lt when first symptom  |
|         | 1               |                    | are notice.  |
| Pig     | All stages      | Porcine            | 1. Culling of positive pigs or piglets.  |
|         |                 | Reproductive       |  |
|         |                 | Respiratory        | 12   |
|         | -               | Syndrome (PRRS).   | ſ,   |
|         | Adult stage     | Swine fever.       | 2. Vaccination of pigs with SF vaccines at 2   |
|         |                 | A                  | months and yearly interval/6 month interval  |
| Cattle  | All age group   | Foot and Mouth     | • FMD vaccine at 16 week and repeat every 6  |
|         | <b>T</b> 7      | Disease (FMD)      | month.   |
|         | Young stage     | Black Quarter (BQ) | Black Quarter Vaccine (BQV).   |
|         |                 |                    | Primary vaccination 6 month or above   |
| Doultwr | A dult atoms    | Danible Disease    | Revaccination annually   |
| Poultry | Adult stage     | Ranikhet Disease.  | • F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.                  |
|         | Early stage     | Coccidiosis        | Amprolium or coccidiostat  |
|         | Larry stage     | Cocciuiosis        | 1. Timpronum of coccidiosiai   |

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(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



Dated: 19th September, 2014

District: Aizawl Period: 20-24 September, 2014

Bulletin No: -451/2014/ Bulletin/English

| Parameters        | 20-09-2014    | 21-09-2014    | 22-09-2014    | 23-09-2014    | 24-09-2014    |
|-------------------|---------------|---------------|---------------|---------------|---------------|
| Rainfall (mm)     | 6             | 5             | 3             | 9             | 14            |
| Max Temp (oC)     | 25            | 27            | 31_           | 30            | 30            |
| Min Temp (oC)     | 20            | N 19          | 19            | 19            | 19            |
| Cloud Coverage    | Mainly cloudy |
| Max RH (%)        | 100           | 95            | 99            | 99            | 99            |
| Min RH (%)        | 93            | 79            | 63            | 63            | 66            |
| Wind Speed (KmpH) | 4             | 4             | 4             | 6             | 6             |
| *Wind Direction   | S             | S-E           | S-E           | S-E           | S-E           |

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

|             |                                | 100   | 1 3   |
|-------------|--------------------------------|---|---|
| Weather sum | mary of the p <mark>ast</mark> | Weather forecast v  | valid from 20 <sup>th</sup> September, 2014 To 24 <sup>th</sup> |
| thre        | e days                         |   | September, 2014.  |
|             |                                | There is a chance of moderate to light rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 25-31°C and 19-20°C. Maximum relative humidity is expected in the range of 95-100% and minimum may from 63-93%. Wind direction would be southeasterly with the wind speed of 4-6 km per hour. Moderate cloud cover will prevail during the next five days.  Weekly cumulative rainfall: 37.0 mm |   |
| Main Crop/  | Stage                          | Cultural practices/   | Agricultural / Horticultural/ animal                            |
| Animal      |                                | Pest/ Diseases  | husbandry advisories  |
| /Fisheries  |                                | / SAIHA   |   |
| Khasi       | Vegetative stage               | <b>Can</b> ker  | <ul> <li>Prune the diseased and dead twigs.</li> </ul>          |
| Mandarin    |                                | l i   | • Wound dressing with Bordeaux paste and                        |

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Mizoram Centre, Kolasib- 796081, MIZORAM





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|           |  |             | mulch with dry grass to conserve moisture                                      |
|-----------|--|-------------|--|
|           |  |             | and suppress the growth of weed.   |
|           |  |             |  |
|           |  |             | • For canker, spray streoptomycin 2g + copperoxycholoride 8 g /10 lt of water. |
|           | 3 7  | 1           | • Excess water removes from the base of the                                    |
|           |  | V           |  |
| D         | <b>T</b> 74  | KOLASIB     | plant.   |
| Banana    | Vegetative/  | ( S         | ✓ Remove water sucker, keep 1 or 2 plants in a                                 |
|           | harvesting   | 3 4 /       | single place.  |
|           | 7  |             | ✓ Remove sword sucker and use it as new planting material.                     |
|           | 7  | 2000        | ✓ Excess water removes from the base of the                                    |
|           |  | > >/        |  |
|           | ₹ MAMIT  |             | plant.  ✓ Fertilizer application in split dose of                              |
|           | 2  | (f          | recommended dose.  |
|           | 3  | AIZAVVL     | ✓ Harvest fruits when the flower tips of the                                   |
|           | (  |             | fruit dehiscent.   |
| Pineapple | Vegetative stage   |             | o Clean the vicinity of plants by weeding and                                  |
| Тіпсарріс | regetative stage   | 1 1/2       | loosen up the soil.  |
|           | ) 6  |             | o Remove slips and use it as a new planting                                    |
|           | ) )  |             | material.  |
|           |  | SERCHH      |  |
|           |  | V           | 3g + Chloropyriphos @ 1 g/lt of water to                                       |
|           | (  |             | protect against soil borne disease and   |
|           |  |             | insect.  |
|           | F-1  |             | o Weeding and intercultural operation.   |
| Cucurbits | Vegetative stage   | LUNGLEI     | Nursery raising for offseason cucurbits.                                       |
|           | (  | Damping off | ✓ Seed treatment with thiram 3g/kg seed or                                     |
|           | V  | 1 0         | Trichoderma viride 4g+ metalaxyl 4g  |
|           |  | A V         | (Apron)/ kg seed   |
|           |  |             | ✓ Drenching 1% Bordeaux mixture or 2 g   |
|           |  | ) 7 (       | captan or 3 copper oxychloride/ lt of water                                    |
|           | View in the second seco | 1 63 3      | at 10-15 DAS are effective.  |
| Brinjal   | Vegetative stage   |             | <ul> <li>Weeding near the plant</li> </ul>                                     |
|           |  | LAWNGTLAL   | Fertilizer application in split dose of  |
|           |  | SAIHA       | recommended dose.  |
|           |  |             | Draining of excess water and preparation                                       |
|           |  |             | mound near the base.   |
|           |  | Disease:    | Seed treatment with captan, thiram or  |
|           |  |             | • 1 D  |

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Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



|                      |                  | Damping off-                                   | chlorothalonil will effectively control this disease.  |
|----------------------|------------------|--|--|
|                      | $\nabla$         | Pest: Mites and hoppers-                       | <ul> <li>Sulfur fungicides can be used to control<br/>this pest.</li> </ul>  |
| Cowpea               | Vegetative stage | KOLASIB  | <ul> <li>Trilling into bower structure.</li> <li>Weeding near the plant</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>  |
|                      | }                | Sca <mark>b and leaf blig</mark> ht<br>disease | ✓ Use of resistant varieties.  |
| Early Cole crop      | Nursery stage    | Land preparation                               | <ul> <li>✓ Nursery preparation for cabbage, cauliflower, broccoli and knolkhol.</li> <li>♣ Raised bed, nursery bed solarisation.</li> <li>♣ Bed should be 1m width and conventional length.</li> <li>♣ Application of FYM (1.5-2.0 kg/ m²)</li> <li>♣ Line sowing of seeds (7-10cm)</li> </ul> |
|                      |                  | Damping off SERCHH                             | ✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.   |
|                      |                  | Mustard sawfly                                 | Application of carbofuran 3G @ 100g/m <sup>2</sup> in nursery is quite effective.  |
| Ginger &<br>Turmeric | Vegetation stage | LUNGLEI  | Weeding in turmeric and ginger field.  |
|                      |                  | Leaf spot and leaf<br>blotch                   | <ul> <li>Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.</li> <li>Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.</li> </ul>   |
| Maize                | Flowering stage  | LAWNGTLAL                                      | <ul><li>✓ Weeding in maize plot</li><li>✓ Topdressing with urea fertilizer.</li></ul>  |
|                      |                  | Pest: SAIHA<br>Corn earworm                    |  |

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Mizoram Centre, Kolasib- 796081, MIZORAM





|         |                 |   | - Crop rotation with leguminous crop.   |
|---------|-----------------|---|---|
|         |                 | Birds   | - Reflecting tape poly propylene metallic   |
|         | 57              |   | shine tape and the other silver that reflects<br>sunlight causing flashing effect is effective<br>in scaring birds.   |
|         |                 | KOLASIB   | - Automatic acetylene exploders or birds scaring gun that produce periodically loud   |
|         | )               | WA )  | noise have been suggested.  |
| Rice    | Flowering Stage | <del>-</del> 1 (                                  | <ul><li>✓ One hand weed will require.</li><li>✓ Application of split dose of Urea.</li></ul>  |
|         | } MAMIT         | Rice Stem borer                                   | <ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>   |
|         |                 | Gundhi bug  | <ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the population reaches ETL of 1 nymph or adult/ hill.</li> </ul> |
|         | 8               | Leaf blast SERCHHI                                | <ul> <li>Judicious application of nitrogenous fertilizer.</li> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>                       |
| Pig     | All stages      | Porcine Reproductive Respiratory Syndrome (PRRS). | 1. Culling of positive pigs or piglets.   |
|         | Adult stage     | Swine fever.                                      | 2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval  |
| Cattle  | All age group   | Foot and Mouth<br>Disease (FMD)                   | • FMD vaccine at 16 week and repeat every 6 month.  |
|         | Young stage     | Black Quarter (BQ)                                | <ul> <li>Black Quarter Vaccine (BQV).</li> <li>Primary vaccination 6 month or above</li> <li>Revaccination annually</li> </ul>  |
| Poultry | Adult stage     | Ranikhet Disease.                                 | • F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.   |
|         | Early stage     | <b>Coccid</b> iosis                               | 1. Amprolium or coccidiostat  |

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#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





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LAWNGTLAL

SAIHA

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Dated: 19th September, 2014

District: Serchhip Period: 20-24 September, 2014

Bulletin No: -451/2014/ Bulletin/English

| Parameters        | 20-09-2014    | 21-09-2014    | 22-09-2014    | 23-09-2014    | 24-09-2014    |
|-------------------|---------------|---------------|---------------|---------------|---------------|
| Rainfall (mm)     | 7             | 0             | 0             | 0             | 0             |
| Max Temp (oC)     | 25            | 27            | 30            | 30            | 30            |
| Min Temp (oC)     | 20            | 19            | 19            | 19            | 19            |
| Cloud Coverage    | Mainly cloudy |
| Max RH (%)        | 100           | 84            | 100           | 100           | 100           |
| Min RH (%)        | 97            | 68            | 53            | 54            | 59            |
| Wind Speed (KmpH) | 4             | 5             | 4             | 4             | 4             |
| Wind Direction    | S-E           | S-E           | S-E           | S-E           | S-E           |

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

|             |                                |  | 3  |  |  |
|-------------|--------------------------------|--|--|--|--|
| Weather sum | mary of the p <mark>ast</mark> | Weather forecast valid from 20 <sup>th</sup> September, 2014 To 24 <sup>th</sup>   |  |  |  |
| thre        | ee days                        |  | September, 2014.                         |  |  |
|             |                                | There is a chance of light rainfall during the next 1 day. The maximum and minimum temperatures for the next 5 days may range for 25-30°C and 19-20°C. Maximum relative humidity is expected in the range of 84-100% and minimum may from 53-97%. Wind direction would be south-easterly with the wind speed of 4-5 km per hour. Moderate cloudy weather will prevail during the next five days.  **Weekly cumulative rainfall: 07.0mm** |  |  |  |
| Main Crop/  | Stage                          | Cultural practices/  | Agricultural / Horticultural/ animal     |  |  |
| Animal      |                                | Pest/ Diseases husbandry advisories  |  |  |  |
| /Fisheries  |                                | F SAIHA  |  |  |  |
| Khasi       | Vegetative stage               | <b>Canker</b> • Prune the diseased and dead twigs.   |  |  |  |
| Mandarin    |                                |  | • Wound dressing with Bordeaux paste and |  |  |

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|           |                  |              | mulch with dry grass to conserve moisture                    |
|-----------|------------------|--------------|--|
|           |                  |              | and suppress the growth of weed.                             |
|           |                  | 1            | • For canker, spray streoptomycin 2g +                       |
|           | 7 1              | 1            | copperoxycholoride 8 g /10 lt of water.                      |
|           | 1                |              | • Excess water removes from the base of the                  |
|           |                  | KOLASIB      | plant.   |
| Banana    | Vegetative/      |              | ✓ Remove water sucker, keep 1 or 2 plants in a               |
|           | harvesting       | (AP)         | single place.  |
|           | 5                |              | ✓ Remove sword sucker and use it as new                      |
|           | 1                | 5            | planting material.   |
|           |                  | 5 5 1        | ✓ Excess water removes from the base of the                  |
|           | · ·              |              | plant.   |
|           | 7 MAMIT          |              | ✓ Fertilizer application in split dose of                    |
|           | 7                | AIZAWL       | recommended dose.  |
|           |                  | A comment of | ✓ Harvest fruits when the flower tips of the                 |
|           | )                |              | fruit dehiscent.   |
| Pineapple | Vegetative stage |              | o Clean the vicinity of plants by weeding and                |
|           |                  | 1 30         | loosen up the soil.  |
|           | ( (              |              | o Remove slips and use it as a new planting                  |
|           | 1. 1. 1. 1.      |              | material.  |
|           |                  | SERCHH       | Sucker dipping treatment with Bavistin @                     |
|           |                  | V L          | 3g + Chloropyriphos @ 1 g/lt of water to                     |
|           | 4                | 4            | protect against soil borne disease and                       |
|           |                  |              | insect.  |
|           |                  |              | o Weeding and intercultural operation.                       |
| Cucurbits | Vegetative stage | LUNGLEI      | Nursery raising for offseason cucurbits.                     |
|           | 1                | Damping off  | ✓ Seed treatment with thiram 3g/kg seed or                   |
|           |                  | 1 5          | Trichoderma viride 4g+ metalaxyl 4g                          |
|           |                  | A /          | (Apron)/ kg seed   |
|           | <u></u>          |              | ✓ Drenching 1% Bordeaux mixture or 2 g                       |
|           | 1                | 100 6        | captan or 3 copper oxychloride/ lt of water                  |
|           | 9                | 1 5 3        | at 10-15 DAS are effective.                                  |
| Brinjal   | Vegetative stage |              | ❖ Weeding near the plant                                     |
|           |                  | LINGSON ALL  | ❖ Fertilizer application in split dose of                    |
|           |                  | LAWNGTLAL    | recommended dose   |
|           |                  | SAINA        | <ul> <li>Draining of excess water and preparation</li> </ul> |
|           |                  |              | mound near the base.   |
|           |                  | Disease:     | o Seed treatment with captan, thiram or                      |

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Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



|                 |                  | Da <mark>m</mark> ping off-  | chlorothalonil will effectively control this                                     |
|-----------------|------------------|--|--|
|                 |                  |  | disease.   |
|                 |                  | Pest:  | <ul> <li>Sulfur fungicides can be used to control</li> </ul>                     |
|                 | 7.7              | Mites and hoppers-   | this pest.   |
| Cowpea          | Vegetative stage | 5  | Trilling into bower structure.   |
|                 |                  | KOLASIB  | Weeding near the plant   |
|                 | 4                |  | Draining of excess water and preparation   |
|                 |                  | Coch and loof blight   | mound near the base.  ✓ Use of resistant varieties.                              |
|                 | }                | Sca <mark>b and leaf blig</mark> ht<br>disease   | Use of resistant varieties.  |
| Early Cole crop | Nursery stage    | Land preparation   | ✓ Nursery preparation for cabbage,   |
|                 |                  |  | cauliflower, broccoli and knolkhol.  |
|                 | 7 MAMIT          | 1 2  | Raised bed, nursery bed solarisation.  |
|                 | 5                | & AIZAVIL 1  | Bed should be 1m width and   |
|                 |                  |  | conventional length.   |
|                 | )                | 1  | Application of FYM (1.5-2.0 kg/ m <sup>2</sup> )                                 |
|                 | 4                | - L 00   | Line sowing of seeds (7-10cm)  |
|                 | 1                | Damping off  | ✓ Seed treatment with thiram 3g/kg seed or                                       |
|                 | 1                |  | Trichoderma viride 4g+ metalaxyl 4g  |
|                 |                  | SERCHH   | (Apron)/kg seed  |
|                 |                  | ( Sercent  | Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water |
|                 |                  |  | at 10-15 DAS are effective.  |
|                 |                  | Mustard sawfly   | ✓ Application of carbofuran 3G @100g/m² in                                       |
|                 | 1                | mustar a sawing  | nursery is quite effective.  |
| Ginger &        | Vegetation stage | THE PARTY OF THE P | ✓ Weeding in turmeric and ginger field.  |
| Turmeric        | regetation stage | LUNGLEI  | weeding in turnierie und ginger riefd.   |
|                 |                  | Leaf spot and leaf   | o Spraying Dithane M-45 @ 2.5g/litre of  |
|                 | 4                | blotch   | water or Bavistin @ 1g/litre of water, 2-3                                       |
|                 |                  | 134  | sprayings should be given forthnightly   |
|                 |                  | ( 6 2  | intervals.   |
|                 |                  |  | o Spraying of Blitox @ 3 g/l of water was  |
|                 |                  | 1 2  | found effective against leaf spot.   |
| Maize           | Flowering stage  |  | ✓ Weeding in maize plot  |
|                 |                  | LAWNGTLAN  | ✓ Topdressing with urea fertilizer.  |
|                 |                  | Pest: SAIHA  | in car worm damage occurs, empp on the up  |
|                 |                  | Corn earworm   | of the ear and any affected kernels. The rest                                    |
|                 |                  |  | of should be fine to eat.  |
|                 |                  |  |  |

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#### ICAR RESEARCH COMPLEX FOR NEH REGION

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(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



|         |                 |   | - Crop rotation with leguminous crop.   |
|---------|-----------------|---|---|
|         | 5               | Birds   | <ul> <li>Reflecting tape poly propylene metallic shine tape and the other silver that reflects sunlight causing flashing effect is effective in scaring birds.</li> <li>Automatic acetylene exploders or birds</li> </ul> |
| Rice    | Flowering Stage | ha S  | scaring gun that produce periodically loud noise have been suggested.  ✓ One hand weed will require.  |
|         | } MAMIT         | Rice Stem borer                                   | <ul> <li>✓ Application of split dose of Urea.</li> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>   |
|         | 1               | Gundhi bug  | <ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the population reaches ETL of 1 nymph or adult/ hill.</li> </ul>                       |
|         | 1               | Leaf blast SERCHHI                                | <ul> <li>Judicious application of nitrogenous fertilizer.</li> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>   |
| Pig     | All stages      | Porcine Reproductive Respiratory Syndrome (PRRS). | 1. Culling of positive pigs or piglets.   |
|         | Adult stage     | Swine fever.                                      | 2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval  |
| Cattle  | All age group   | Foot and Mouth<br>Disease (FMD)                   | • FMD vaccine at 16 week and repeat every 6 month.  |
|         | Young stage     | Black Quarter (BQ)                                | <ul> <li>Black Quarter Vaccine (BQV).</li> <li>Primary vaccination 6 month or above</li> <li>Revaccination annually</li> </ul>  |
| Poultry | Adult stage     | Ranikhet Disease.                                 | • F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.   |
|         | Early stage     | <b>Coccid</b> iosis                               | Amprolium or coccidiostat   |

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#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





Dated: 19th September, 2014

District: Mamit Period: 20-24 September, 2014

Bulletin No: -451/2014/ Bulletin/English

| Parameters        | 20-09-2014    | 21-09-2014    | 22-09-2014    | 23-09-2014    | 24-09-2014    |
|-------------------|---------------|---------------|---------------|---------------|---------------|
| Rainfall (mm)     | 6             | 5 5 5 10      | 3             | 9             | 14            |
| Max Temp (oC)     | 28            | 28            | 31_           | 30            | 30            |
| Min Temp (oC)     | 22            | 20            | 21            | 21            | 22            |
| Cloud Coverage    | Mainly cloudy |
| Max RH (%)        | 99            | 94            | 98            | 99            | 98            |
| Min RH (%)        | 89            | 78            | 65            | 67            | 69            |
| Wind Speed (KmpH) | 6             | 4             | 4             | 7             | 6             |
| Wind Direction    | S             | S-E           | S-E           | S-E           | S-E           |

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

| Weather summary of the past |                  | Weather forecast valid from 20 <sup>th</sup> September, 2014 To 24 <sup>th</sup>   |                                      |  |
|-----------------------------|------------------|--|--------------------------------------|--|
| three days                  |                  |  | September, 2014.                     |  |
|                             |                  | There is a chance of moderate to light rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 28-31°C and 20-22°C. Maximum relative humidity is expected in the range of 94-99% and minimum may from 65-89%. Wind direction would be southeasterly with the wind speed of 4-7 km per hour. Moderate cloudy weather will prevail during the next five days. |                                      |  |
|                             |                  | •  | y cumulative rainfall: 37.0mm        |  |
| Main Crop/                  | Stage            | Cultural practices/  | Agricultural / Horticultural/ animal |  |
| Animal                      |                  | Pest/ Diseases   | husbandry advisories                 |  |
| /Fisheries                  |                  | / SAIHA  | \                                    |  |
| Khasi                       | Vegetative stage | Canker • Prune the diseased and dead twigs.  |                                      |  |

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• Wound dressing with Bordeaux paste and

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Mandarin



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(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



| and suppress the growth of weed.  • For canker, spray streoptomycin 2g copperoxycholoride 8 g /10 lt of water.  • Excess water removes from the base of the plant.  Vegetative/ harvesting  Vegetative/ harvesting  Remove water sucker, keep 1 or 2 plants in single place.  ✓ Remove sword sucker and use it as net planting material.  ✓ Excess water removes from the base of the planting material. |
|--|
| copperoxycholoride 8 g /10 lt of water.  • Excess water removes from the base of the plant.  Banana  Vegetative/ harvesting  Vegetative/ harvesting  Remove water sucker, keep 1 or 2 plants in single place.  ✓ Remove sword sucker and use it as ne planting material.   |
| Banana  Vegetative/ harvesting  • Excess water removes from the base of the plant.  ✓ Remove water sucker, keep 1 or 2 plants in single place. ✓ Remove sword sucker and use it as ne planting material.   |
| Banana  Vegetative/ harvesting  plant.  ✓ Remove water sucker, keep 1 or 2 plants in single place. ✓ Remove sword sucker and use it as ne planting material.   |
| Banana  Vegetative/ harvesting  ✓ Remove water sucker, keep 1 or 2 plants in single place. ✓ Remove sword sucker and use it as ne planting material.   |
| harvesting  single place.  ✓ Remove sword sucker and use it as ne planting material.   |
| ✓ Remove sword sucker and use it as ne planting material.  |
| planting material.   |
|  |
| ✓ Freeze water ramovae from the hase of t  |
| A 50 1   |
| plant.   |
| ✓ Fertilizer application in split dose   |
| recommended dose.  |
| ✓ Harvest fruits when the flower tips of t   |
| fruit dehiscent.   |
| Pineapple Vegetative stage o Clean the vicinity of plants by weeding an  |
| loosen up the soil.  |
| o Remove slips and use it as a new planting  |
| material.  |
| SERCHHIPO Sucker dipping treatment with Bavistin   |
| 3g + Chloropyriphos @ 1 g/lt of water  |
| protect against soil borne disease and   |
| insect,  |
| o Weeding and intercultural operation.   |
| Cucurbits Vegetative stage   |
| Damping off ✓ Seed treatment with thiram 3g/kg seed or   |
| Trichoderma viride 4g+ metalaxyl 4g  |
| (Apron)/ kg seed   |
| Drenching 1% Bordeaux mixture or 2 g   |
| captan or 3 copper oxychloride/ lt of water  |
| at 10-15 DAS are effective.  |
| Brinjal Vegetative stage Weeding near the plant  |
| A Fertilizer application in split dose   |
| recommended dose   |
| ◆ Draining of excess water and preparation   |
| mound near the base.   |
| <b>Disease:</b> O Seed treatment with captan, thiram or  |

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|                 |                  | Da <mark>mpi</mark> ng off- | chlorothalonil will effectively control this                            |
|-----------------|------------------|-----------------------------|---|
|                 |                  |                             | disease.  |
|                 |                  | Pest:                       | o Sulfur fungicides can be used to control                              |
| ~               |                  | Mites and hoppers-          | this pest.  |
| Cowpea          | Vegetative stage |                             | Trilling into bower structure.  |
|                 |                  | KOLASIB 1                   | Weeding near the plant  |
|                 | 4                |                             | Draining of excess water and preparation                                |
|                 | 1                |                             | mound near the base.  |
|                 | >                | Scab and leaf blight        | ✓ Use of resistant varieties.   |
| <b>D</b> 1 0 1  |                  | disease                     | ( ) ( ) ( ) ( ) ( )   |
| Early Cole crop | Nursery stage    | Land preparation            | ✓ Nursery preparation for cabbage,                                      |
|                 | Summe            |                             | cauliflower, broccoli and knolkhol.                                     |
|                 | 7 MAMIT          | 4                           | Raised bed, nursery bed solarisation.                                   |
|                 | 7                | & ATZAWL 1                  | Bed should be 1m width and  |
|                 |                  |                             | conventional length.  |
|                 |                  | 3                           | Application of FYM $(1.5-2.0 \text{ kg/m}^2)$                           |
|                 | 1                | 5                           | Line sowing of seeds (7-10cm)   |
|                 | 1 6              | Damping off                 | ✓ Seed treatment with thiram 3g/kg seed or                              |
|                 | 1 5              |                             | Trichoderma viride 4g+ metalaxyl 4g                                     |
|                 |                  | SERCHH                      | (Apron)/ kg seed  |
|                 |                  | SCROHN                      | 8 - 11 - 11 - 11 - 11 - 1   |
|                 |                  |                             | captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective. |
|                 |                  | Mustard sawfly              | ✓ Application of carbofuran 3G @100g/m² in                              |
|                 |                  | Mustaru sawiry              | nursery is quite effective.   |
| Ginger &        | Vegetation stage | CONTROL EN                  | ✓ Weeding in turmeric and ginger field.                                 |
| Turmeric        | vegetation stage | LUNGLEI                     | weeding in turneric and ginger field.                                   |
|                 | 1                | Leaf spot and leaf          | o Spraying Dithane M-45 @ 2.5g/litre of                                 |
|                 | <b>N</b>         | blotch                      | water or Bavistin @ 1g/litre of water, 2-3                              |
|                 |                  |                             | sprayings should be given forthnightly                                  |
|                 |                  | Si A                        | intervals.  |
|                 |                  |                             | o Spraying of Blitox @ 3 g/l of water was                               |
|                 |                  |                             | found effective against leaf spot.                                      |
| Maize           | Flowering stage  |                             | ✓ Weeding in maize plot   |
|                 |                  | LAWNGTLAL                   | ✓ Topdressing with urea fertilizer.                                     |
|                 |                  | Pest: SAIHA                 |   |
|                 |                  | Corn earworm                | of the ear and any affected kernels. The rest                           |
|                 |                  | 1                           | of should be fine to eat.   |
| J.              |                  | FU C                        |   |

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#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM





|         |                 |   | - Crop rotation with leguminous crop.   |
|---------|-----------------|---|---|
|         |                 | Birds   | - Reflecting tape poly propylene metallic   |
|         | 57              | 1   | shine tape and the other silver that reflects<br>sunlight causing flashing effect is effective<br>in scaring birds.   |
|         |                 | KOLASIB   | - Automatic acetylene exploders or birds scaring gun that produce periodically loud   |
|         | 3               | 1   | noise have been suggested.  |
| Rice    | Flowering Stage | £1 (  | <ul><li>✓ One hand weed will require.</li><li>✓ Application of split dose of Urea.</li></ul>  |
|         | } MAMIT         | Rice Stem borer                                   | <ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>   |
|         |                 | Gundhi bug  | <ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the population reaches ETL of 1 nymph or adult/ hill.</li> </ul> |
|         | 8               | Leaf blast SERCHHI                                | <ul> <li>Judicious application of nitrogenous fertilizer.</li> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>                       |
| Pig     | All stages      | Porcine Reproductive Respiratory Syndrome (PRRS). | 1. Culling of positive pigs or piglets.   |
|         | Adult stage     | Swine fever.                                      | 2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval  |
| Cattle  | All age group   | Foot and Mouth<br>Disease (FMD)                   | • FMD vaccine at 16 week and repeat every 6 month.  |
|         | Young stage     | Black Quarter (BQ)                                | <ul> <li>Black Quarter Vaccine (BQV).</li> <li>Primary vaccination 6 month or above</li> <li>Revaccination annually</li> </ul>  |
| Poultry | Adult stage     | Ranikhet Disease.                                 | • F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.   |
|         | Early stage     | <b>Coccid</b> iosis                               | 1. Amprolium or coccidiostat  |

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LAWNGTLAL

SAIHA

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Dated: 19th September, 2014

District: Lunglei Period: 20-24 September, 2014

Bulletin No: -451/2014/ Bulletin/English

| Parameters        | 20-09-2014    | 21-09-2014    | 22-09-2014    | 23-09-2014    | 24-09-2014    |
|-------------------|---------------|---------------|---------------|---------------|---------------|
| Rainfall (mm)     | 12            | 7.00          | 4             | 11            | 12            |
| Max Temp (oC)     | 27            | 26            | 30            | 30            | 30            |
| Min Temp (oC)     | 21            | 20            | 19            | 20            | 20            |
| Cloud Coverage    | Mainly cloudy |
| Max RH (%)        | 99            | 87            | 98            | 100           | 99            |
| Min RH (%)        | 91            | 70            | 58            | 59            | 63            |
| Wind Speed (KmpH) | 5             | 6             | 5             | 6             | 4             |
| Wind Direction    | S-E           | S-E           | S-E           | S-E           | S-E           |

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

| Weather summary of the past | Weather forecast valid from 20 <sup>th</sup> September, 2014 To 24 <sup>th</sup>   |  |  |
|-----------------------------|--|--|--|
| three days                  | S  | September, 2014.   |  |
|                             | maximum and minimum te 27-30°C and 19-21°C. Ma range of 87-100% and mi would be easterly and sout hour. Moderate cloudy we | ate to light rainfall during the next 5 day. The imperatures for the next 5 days may range for ximum relative humidity is expected in the inimum may from 58-91%. Wind direction heasterly with the wind speed of 4-6 km per ather will prevail during the next five days. |  |
| Main Crop/ Stage            | Cultural practices/  | Agricultural / Horticultural/ animal   |  |
| Animal                      | Pest/ Diseases   | husbandry advisories   |  |
| /Fisheries                  | SAIHA  | 1  |  |

Canker

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• Prune the diseased and dead twigs.

• Wound dressing with Bordeaux paste and

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Vegetative stage

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Khasi

Mandarin



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|           |                      |             | mulch with dry grass to conserve moisture   |
|-----------|----------------------|-------------|---|
|           |                      | 1           | <ul><li>and suppress the growth of weed.</li><li>For canker, spray streoptomycin 2g +</li></ul> |
|           |                      | 2           | copperoxycholoride 8 g /10 lt of water.   |
|           | ) \_                 | £ 5         | • Excess water removes from the base of the   |
|           |                      | KOLASIB     | plant.  |
| Banana    | Vegetative/          |             | ✓ Remove water sucker, keep 1 or 2 plants in a  |
|           | harvesting           | (40)        | single place.   |
|           | 5                    |             | ✓ Remove sword sucker and use it as new   |
|           | 7                    | 5 5         | planting material.  |
|           |                      | )           | ✓ Excess water removes from the base of the   |
|           | \$ MAMIT             |             | plant.  |
|           | [ meant              | The second  | ✓ Fertilizer application in split dose of recommended dose.                                     |
|           | 3                    | A AZAWL     | ✓ Harvest fruits when the flower tips of the  |
|           | \ \                  |             | fruit dehiscent.  |
| Pineapple | Vegetative stage     |             | o Clean the vicinity of plants by weeding and   |
|           | , egettiez ( e sange | 1 3/3       | loosen up the soil.   |
|           | 1                    |             | o Remove slips and use it as a new planting   |
|           | ) )                  |             | material.   |
|           |                      | SERCHI      | Sucker dipping treatment with Bavistin @  |
|           | l l                  | V           | 3g + Chloropyriphos @ 1 g/lt of water to  |
|           | -                    | 4           | protect against soil borne disease and  |
|           | 1                    |             | insect.   |
| C         | V4-4:4               |             | o Weeding and intercultural operation.  |
| Cucurbits | Vegetative stage     | LUNGLEI     | Nursery raising for offseason cucurbits.  |
|           | 1                    | Damping off | ✓ Seed treatment with thiram 3g/kg seed or  |
|           |                      | 74 EX       | Trichoderma viride 4g+ metalaxyl 4g   |
|           |                      |             | (Apron)/ kg seed  |
|           | 3                    |             | Drenching 1% Bordeaux mixture or 2 g  |
|           |                      |             | captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.                         |
| Brinjal   | Vegetative stage     | 1 -21       | <ul> <li>at 10-15 DAS are effective.</li> <li>★ Weeding near the plant</li> </ul>               |
| Dillijai  | vegetative stage     |             | • Fertilizer application in split dose of   |
|           |                      | LAWNGTLAV   | recommended dose  |
|           |                      | / SAIH      | <ul> <li>Draining of excess water and preparation</li> </ul>                                    |
|           |                      |             | mound near the base.  |
|           |                      | Disease:    | Seed treatment with captan, thiram or   |

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Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



|                      |                  | Damping off-                                   | chlorothalonil will effectively control this disease.  |
|----------------------|------------------|--|--|
|                      | 5                | Pest: Mites and hoppers-                       | <ul> <li>Sulfur fungicides can be used to control<br/>this pest.</li> </ul>  |
| Cowpea               | Vegetative stage | KOLASIB  | <ul> <li>Trilling into bower structure.</li> <li>Weeding near the plant</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>  |
|                      | }                | Sca <mark>b and leaf blig</mark> ht<br>disease | ✓ Use of resistant varieties.  |
| Early Cole crop      | Nursery stage    | Land preparation                               | <ul> <li>✓ Nursery preparation for cabbage, cauliflower, broccoli and knolkhol.</li> <li>♣ Raised bed, nursery bed solarisation.</li> <li>♣ Bed should be 1m width and conventional length.</li> <li>♣ Application of FYM (1.5-2.0 kg/ m²)</li> <li>♣ Line sowing of seeds (7-10cm)</li> </ul> |
|                      |                  | Damping off SERCHH                             | ✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.   |
|                      |                  | Mustard sawfly                                 | Application of carbofuran 3G @100g/m <sup>2</sup> in nursery is quite effective.   |
| Ginger &<br>Turmeric | Vegetation stage | LUNGLEI  | Weeding in turmeric and ginger field.  |
|                      |                  | Leaf spot and leaf<br>blotch                   | <ul> <li>Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.</li> <li>Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.</li> </ul>   |
| Maize                | Flowering stage  | LAWNGTLAL                                      | <ul><li>✓ Weeding in maize plot</li><li>✓ Topdressing with urea fertilizer.</li></ul>  |
|                      |                  | Pest: SAIHA Corn earworm                       |  |

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|   | The state of the s |
|---|--|
|   | - Crop rotation with leguminous crop.  |
| Birds   | - Reflecting tape poly propylene metallic<br>shine tape and the other silver that reflects<br>sunlight causing flashing effect is effective  |
| KOLASIB   | <ul> <li>in scaring birds.</li> <li>Automatic acetylene exploders or birds scaring gun that produce periodically loud noise have been suggested.</li> </ul>  |
| 11  | <ul><li>✓ One hand weed will require.</li><li>✓ Application of split dose of Urea.</li></ul>   |
| Rice Stem borer                                   | <ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>  |
| Gundhi bug  | <ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the population reaches ETL of 1 nymph or adult/ hill.</li> </ul>  |
| Leaf blast SERCHHI                                | <ul> <li>Judicious application of nitrogenous fertilizer.</li> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>  |
| Porcine Reproductive Respiratory Syndrome (PRRS). | 1. Culling of positive pigs or piglets.  |
| Swine fever.                                      | 2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval   |
| Foot and Mouth<br>Disease (FMD)                   | • FMD vaccine at 16 week and repeat every 6 month.   |
| Black Quarter (BQ)                                | <ul> <li>Black Quarter Vaccine (BQV).</li> <li>Primary vaccination 6 month or above</li> <li>Revaccination annually</li> </ul>   |
| Ranikhet Disease.                                 | • F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.  |
| Coccidiosis                                       | 1. Amprolium or coccidiostat   |
|   | Porcine Reproductive Respiratory Syndrome (PRRS). Swine fever.  Foot and Mouth Disease (FMD) Black Quarter (BQ)  Ranikhet Disease.   |

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LAWNGTLAL

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Mizoram Centre, Kolasib- 796081, MIZORAM





Dated: 19th September, 2014

District: Lawngtalai Period: 20-24 September, 2014

Bulletin No: -451/2014/ Bulletin/English

| Parameters        | 20-09-2014    | 21-09-2014    | 22-09-2014    | 23-09-2014   | 24-09-2014    |
|-------------------|---------------|---------------|---------------|--------------|---------------|
| Rainfall (mm)     | 28            | 13            | 10            | 21           | 37            |
| Max Temp (oC)     | 28            | 24            | 29            | 29           | 29            |
| Min Temp (oC)     | 21            | 20            | 20            | 20           | 20            |
| Cloud Coverage    | Mainly cloudy | Mainly cloudy | Mainly cloudy | Mainly clear | Mainly cloudy |
| Max RH (%)        | 98            | 93            | 94            | 98           | 98            |
| Min RH (%)        | 91            | 84            | 64            | 65           | 68            |
| Wind Speed (KmpH) | 8             | 8             | 7             | 7            | 6             |
| Wind Direction    | S-E           | S-E           | S-E           | S-E          | S-E           |

Northerly- N, North-Easterly- N-E, Easterly- E, South-Easterly- S-E, Southerly- S, South-Westerly- S-W, Westerly-W, North-westerly- N-W.

STATUS OF MONSOON- August 1-30, 2014 (Percent of deviation from normal in parenthesis)

Kolasib- 372.1mm Champhai- 329.7mm Mamit-376.0 mm Aizawl-378.0mm (19.16) (-28.00) (-20.69) (7.33)

Serchhip- 166.7 mm Lawngtalia- 365.4 mm Lunglei- 371.4 mm Chhimtuipui- 367.8 mm (-32.04) (-64.68) (-16.55) (-32.04)

| Weather summary of the past |                  | Weather forecast valid from 20 <sup>th</sup> September, 2014 To 24 <sup>th</sup>   |  |
|-----------------------------|------------------|--|--|
| thre                        | e days           | September, 2014.   |  |
|                             |                  | There is a chance of moderate to light rainfall during the next 5 day. The maximum and minimum temperatures for the next 5 days may range for 24-29°C and 20-21°C. Maximum relative humidity is expected in the range of 93-98% and minimum may from 64-91%. Wind direction would be southeasterly with the wind speed of 6-8 km per hour. Dense cloudy weather will prevail during the next five days.  *Weekly cumulative rainfall: 109.0mm* |  |
| Main Crop/                  | Stage            | Cultural practices/  | Agricultural / Horticultural/ animal                   |
| Animal                      |                  | Pest/ Diseases   | husbandry advisories                                   |
| /Fisheries                  |                  | / SAIHA  | \  |
| Khasi                       | Vegetative stage | <b>Can</b> ker   | <ul> <li>Prune the diseased and dead twigs.</li> </ul> |

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• Wound dressing with Bordeaux paste and

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Mandarin



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|           |                    |  | mulch with dry grass to conserve moisture  |
|-----------|--------------------|--|--|
|           |                    |  | and suppress the growth of weed.   |
|           |                    |  | • For canker, spray streoptomycin 2g +   |
|           |                    |  | copperoxycholoride 8 g /10 lt of water.  |
|           | 3 1                | 1  | • Excess water removes from the base of the                                      |
|           |                    | KOLASIB  | plant.   |
| Banana    | Vegetative/        | RULASIB  | Remove water sucker, keep 1 or 2 plants in a                                     |
| Danana    | harvesting         | AL.  | single place.  |
|           | nai vesting        | 3 1  | ✓ Remove sword sucker and use it as new  |
|           | 1                  |  | planting material.   |
|           | 1                  |  | ✓ Excess water removes from the base of the                                      |
|           | J                  |  | plant.   |
|           | 7 MAMIT            |  | ✓ Fertilizer application in split dose of  |
|           | ζ.                 | AIZAWL   | recommended dose.  |
|           | - S                | Cultural   | ✓ Harvest fruits when the flower tips of the                                     |
|           |                    |  | fruit dehiscent.   |
| Pineapple | Vegetative stage   | 1 2  | o Clean the vicinity of plants by weeding and                                    |
|           |                    | ( ) 1  | loosen up the soil.  |
|           |                    |  | o Remove slips and use it as a new planting                                      |
|           | 11                 |  | material.  |
|           |                    | SERCHH   | II 8   |
|           | N N                | V L-   | 3g + Chloropyriphos @ 1 g/lt of water to   |
|           | 7                  |  | protect against soil borne disease and   |
|           |                    |  | insect.  |
| Cucurbits | Vagatativa ataga   | TOTAL STATE OF THE | Weeding and intercultural operation.  Number religion for office and a supplied. |
| Cucurbits | Vegetative stage   | LUNGLEI  | Nursery raising for offseason cucurbits.   |
|           | 1                  | Damping off  | ✓ Seed treatment with thiram 3g/kg seed or                                       |
|           | L.                 | ~ 8~   | Trichoderma viride 4g+ metalaxyl 4g  |
|           |                    |  | (Apron)/ kg seed   |
|           | 3                  | Car on   | ✓ Drenching 1% Bordeaux mixture or 2 g   |
|           |                    | 8 1 5 1 5  | captan or 3 copper oxychloride/ lt of water                                      |
| D ' ' I   | <b>T</b> 7 4 4 • 4 |  | at 10-15 DAS are effective.  |
| Brinjal   | Vegetative stage   |  | • Weeding near the plant   |
|           |                    | LAWNGTLAL  | ❖ Fertilizer application in split dose of recommended dose.                      |
|           |                    | / SAIHA  | <ul> <li>Draining of excess water and preparation</li> </ul>                     |
|           |                    |  | mound near the base.   |
|           |                    | Disease:   | <ul><li>Seed treatment with captan, thiram or</li></ul>                          |
|           | <u></u>            | Zastase.   | o zoo nomion min oupun, minin or   |

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#### ICAR RESEARCH COMPLEX FOR NEH REGION

Mizoram Centre, Kolasib- 796081, MIZORAM

(Prepared based on District wise Weather Forecast received from IMD, Guwahati)



|                      |                  | Damping off-                                   | chlorothalonil will effectively control this disease.  |
|----------------------|------------------|--|--|
|                      | 5                | Pest: Mites and hoppers-                       | <ul> <li>Sulfur fungicides can be used to control<br/>this pest.</li> </ul>  |
| Cowpea               | Vegetative stage | KOLASIB  | <ul> <li>Trilling into bower structure.</li> <li>Weeding near the plant</li> <li>Draining of excess water and preparation mound near the base.</li> </ul>  |
|                      | }                | Sca <mark>b and leaf blig</mark> ht<br>disease | ✓ Use of resistant varieties.  |
| Early Cole crop      | Nursery stage    | Land preparation                               | <ul> <li>✓ Nursery preparation for cabbage, cauliflower, broccoli and knolkhol.</li> <li>♣ Raised bed, nursery bed solarisation.</li> <li>♣ Bed should be 1m width and conventional length.</li> <li>♣ Application of FYM (1.5-2.0 kg/ m²)</li> <li>♣ Line sowing of seeds (7-10cm)</li> </ul> |
|                      |                  | Damping off SERCHH                             | ✓ Seed treatment with thiram 3g/kg seed or Trichoderma viride 4g+ metalaxyl 4g (Apron)/ kg seed ✓ Drenching 1% Bordeaux mixture or 2 g captan or 3 copper oxychloride/ lt of water at 10-15 DAS are effective.   |
|                      |                  | Mustard sawfly                                 | Application of carbofuran 3G @ 100g/m <sup>2</sup> in nursery is quite effective.  |
| Ginger &<br>Turmeric | Vegetation stage | LUNGLEI  | Weeding in turmeric and ginger field.  |
|                      |                  | Leaf spot and leaf<br>blotch                   | <ul> <li>Spraying Dithane M-45 @ 2.5g/litre of water or Bavistin @ 1g/litre of water, 2-3 sprayings should be given forthnightly intervals.</li> <li>Spraying of Blitox @ 3 g/l of water was found effective against leaf spot.</li> </ul>   |
| Maize                | Flowering stage  | LAWNGTLAL                                      | <ul><li>✓ Weeding in maize plot</li><li>✓ Topdressing with urea fertilizer.</li></ul>  |
|                      |                  | Pest: SAIHA<br>Corn earworm                    |  |

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|         |                 |   | - Crop rotation with leguminous crop.   |
|---------|-----------------|---|---|
|         |                 | Birds   | - Reflecting tape poly propylene metallic   |
|         | 57              |   | shine tape and the other silver that reflects<br>sunlight causing flashing effect is effective<br>in scaring birds.   |
|         |                 | KOLASIB   | - Automatic acetylene exploders or birds scaring gun that produce periodically loud   |
|         | )               | W.  | noise have been suggested.  |
| Rice    | Flowering Stage | <del>-</del> 1 (                                  | <ul><li>✓ One hand weed will require.</li><li>✓ Application of split dose of Urea.</li></ul>  |
|         | } MAMIT         | Rice Stem borer                                   | <ul> <li>Destroy egg masses.</li> <li>Spraying of monocrotophos 20ml/10lt water or Imidacloprid 20ml/10lt water.</li> </ul>   |
|         |                 | Gundhi bug  | <ul> <li>Spray monocrotophos 36 WSC @ 1.5 ml/lt or endosulfan 35 EC @ 1.5 ml/ml</li> <li>Insecticide application should be done if the population reaches ETL of 1 nymph or adult/ hill.</li> </ul> |
|         | 8               | Leaf blast SERCHHI                                | <ul> <li>Judicious application of nitrogenous fertilizer.</li> <li>Spraying with triclozole (Beam) @0.5gm/lt or edifenphos @ 1ml/lt when first symptom are notice.</li> </ul>                       |
| Pig     | All stages      | Porcine Reproductive Respiratory Syndrome (PRRS). | 1. Culling of positive pigs or piglets.   |
|         | Adult stage     | Swine fever.                                      | 2. Vaccination of pigs with SF vaccines at 2 months and yearly interval/6 month interval  |
| Cattle  | All age group   | Foot and Mouth<br>Disease (FMD)                   | • FMD vaccine at 16 week and repeat every 6 month.  |
|         | Young stage     | Black Quarter (BQ)                                | <ul> <li>Black Quarter Vaccine (BQV).</li> <li>Primary vaccination 6 month or above</li> <li>Revaccination annually</li> </ul>  |
| Poultry | Adult stage     | Ranikhet Disease.                                 | • F1 vaccine at (1-6) days of birth and R <sub>2</sub> B vaccine for adult birds.   |
|         | Early stage     | <b>Coccid</b> iosis                               | 1. Amprolium or coccidiostat  |

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