GRAMIN KRISHI MAUSAM SEWA
ICAR Research Complex for NEH Region
Umroi Road, Umiam – 793 103 Meghalaya
☎: Telephone No. : 0364 2570276 (O) Fax: 0364 2570213/Email: iaasbarapani@yahoo.in

RC (AE)/30/2011/ Bulletin/September'2014/48 Dated: 12/09/2014

Agro Advisory Bulletin – Jaintia Hills
(Period 13th – 17th Sept, 2014)

Weather summery of the past three days (9th to 11th Sept, 2014)	Weather forecast valid up to 17th Sept, 2014
Sky was mainly clear to generally cloudy with moderate rainfall of **16.3mm**. Maximum temperatures ranged between 27-28.3°C and minimum ranged between 17.5-18.8°C. Mean relative humidity was 85-86% in morning and 77-80% in evening. Wind speed ranged between 1.3-1.6 kmph.	There is possibility of moderate rain in the next five days. Sky may be partly cloudy to generally cloudy with a maximum and minimum temperature of 27°C & 19°C respectively. The expected relative humidity will be 94-97% (maximum) & 52-56% (minimum). Wind direction will be 119-184Degree at a speed of 2 kmph during the next five days.

Weekly cumulative rainfall :114.0mm

Agro meteorological Advisories for coming 5 days

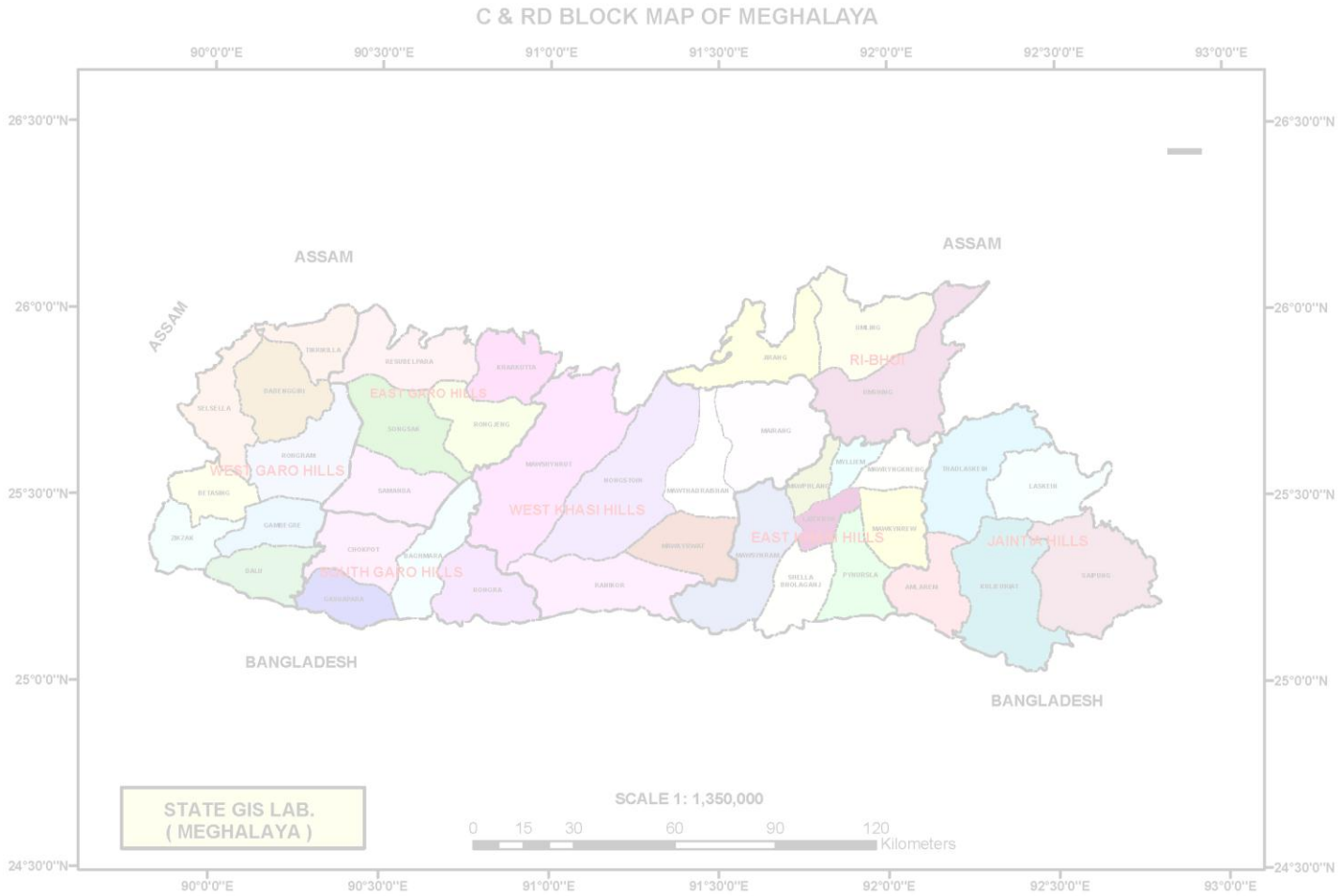
Main Crop/ Animal /Fisheries	Stage	Pest/Diseases	Agricultural Advisories
Sali/ Kharif Rice	Tillering to panicle initiation stage		• Repair bunds and keep free from weeds • Maintained a water level of 3-5 cm in the field and drain out excess water due to rains. • 1st top dressing of urea (44Kg/ha) should be done at tillering stage after 1st hand weeding or using cono-weeder.
Direct seeded Ahu	Tillering/Panicle initiation stage		• Do top dressing of 1/3rd urea (44Kg/ha) after 2nd hand weeding at 40-45 DAS. • Conserve water by repairing bunds.
		Blast	• Due to cloudy & high humidity, there is chance of incidence of blast. Spray Mencozeb @ 2g/litre or Carbendezime @1g/l if blast spots are seen after the current spells of rain.
		Thrips	• Farmers should keep vigilance against the attack of thrips and spray insecticide like Chloropyriphos @ 2ml/lit of water if moderate to high intensity is observed.
		Rice Gundhi bug/Stem borer	• Spray Malathion 5% dust @ 6.25kg/ha for Rice Gandhi bug and Chloropyriphos @0.02% or Monocrotophos @ 0.04% for stem borer.
Jhum Rice	Tillering to panicle initiation stage		• Bhalum 1, 2, 3; IRAT 109, IR 50 rice are in panicle initiation stage. • Keep the fields free from weeds.
Groundnut	Pod formation and development stage	Late leaf spot Rust Groundnut leaf miner/ Leaf folder	• Weather is congenial for development of late leaf spot. Spray carbendazim (0.05%) + mancozeb (0.2%) at 2- 3 weeks intervals. • Foliar application of aqueous neem leaf extract (2-5%) or mancozeb @ 0.3% should be done if chlorotic spots are seen on the upper part and orange colored pustules on the lower part of the leaf. • Foliar sprays with acephate 1 g/l or chlorpyriphos 2.5 ml/l or monocrotophos 1.6 ml/L.
Ginger/ Turmeric	Rhizome initiation stage		• Give one hand weeding followed by fertilizer application, earthing up and mulching. • Apply 81.4 kg/ha urea and 41.75 kg/ha MOP for ginger;

			for turmeric apply 65.1 kg/ha urea and 100.2 kg/ha MOP at 90 DAS. • Mulching can be done with locally available weed biomass, maize stalk, etc. • Avoid water logging as it causes rhizome rot and fungal disease development.
		Leaf Spot Rhizome rot (ginger)	• To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5weeks of sowing or Captan @ 1.5 g/l of water. • Spray/ drench 1% Bordeaux mixture or Dithane M-45 (2.5g/l) to prevent rhizome rot.
Potato	Land preparation		• Undertake land preparation for sowing of potato. • Apply 100q/ha FYM in furrows before planting. • Collect tuber seeds of HYVs like Kufri Joyti, Kufri Megha, Kufri Giriraj, Kufri Girdhari, Kufri Himsona, Kufri Himalini and keep ready for sowing.
Nursery Bed Preparation for vegetables (Cabbage, Cauliflower, Broccoli) ➢ Prepare raised nursery bed of height of 15 cm, 1m width and length of convenient length. ➢ Drench the nursery bed with Dithane M-45 @ 3g/m2 to prevent the incidence of damping off. ➢ Apply FYM @ 4-6 kg/m2 and mix well with the soil and leveled the bed. ➢ Make rows of 5 cm distance along the width of the bed with the help of bamboo stick. ➢ Sow the seeds at 1-2 cm deep in the line and covered with sieved FYM, sand and soil mixture. ➢ Covered the bed with dry grass/paddy straw or polythene to induce early germination & removed the coverage as soon as sprouts come out. ➢ Irrigate should be given daily. ➢ Transplant the seedlings 3-6 weeks old at proper spacing. ➢ Proper channels for draining excess water to avoid water logging.			
Cauliflower	Nursery preparation to transplanting		• Recommended variety: **Meghalaya Local** • Seed rate of 400-500g is required for transplanting of 1 ha. Transplant 3- 5 weeks old seedlings at a spacing of 60 cm row to row & 45cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) at the time of transplanting
Cabbage	Nursery preparation to transplanting		• Recommended variety: **H-139, Pride of India** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45 cm row to row & 30cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) & at the time of transplanting.
Broccoli	Nursery preparation to transplanting		• Recommended variety: **Puspa, Aiswarya** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45cm row to row & 30cm plant to plant. • Apply half dose of N (30 kg/ha urea), full dose of P (500 kg/ha SSP) and K (100 kg/ha MOP) at the time of transplanting.
Carrot	Sowing		• Recommended variety: **New Karoda, Nantesh** • Seed rate of 8-10g is required for transplanting of 1 ha. • Seeds should be soaked overnight before sowing. • Seeds can be sown either by broadcasting or in rows. Rows should be made at distance of 25cm apart and sow the seeds in the rows & later do thinning maintaining plant to plant distance of 5 cm.

			• Keep the soil moist by frequent light irrigation for proper growth of roots. • Apply half N (108.5 kg/ha urea) and full P (375 kg/ha SSP) and K (100.2 kg/ha MOP) as basal dose at the time of final land preparation.
Radish	Sowing		• Recommended variety: **Local genotype** • Seed rate of 8-10g is required for transplanting of 1 ha. • Prepare ridges of 20 cm at 30-45 cm distance & sow the seeds on ridges. • Thinning should be done maintaining plant to plant distance of 7-10 cm in a row soon after they are established. • Apply half dose of N (108.5 kg/ha urea), full dose of P (375 kg/ha SSP) & K (100kg/ha MOP) as basal. • Give irrigate immediately after sowing.
Laipatta	Nursery preparation		• Recommended variety: **Local** • Seed rate of 400-500g is required for transplanting of 1 ha.
French Bean	Sowing		• After harvesting the maize crop, take up French bean and utilize the stalk of maize for climbing. • Recommended variety: **Naga Local** • Seed rate of 20-25kg is required for 1 ha. • Maintained a spacing of 45 cm row to row & 15-20 cm plant to plant. • Fertilizer dose N: P: K - 60:60:40 kg/ha. Apply half dose of N (65kg/ha urea), full dose of P (375kg/ha SSP) & K (66.8kg/ha) at the time of sowing.
Bottle gourd & Ash gourd	Fruiting to harvesting	Powdery Mildew Fruit fly	• Spray **Bavistin** 0.1% or **Karathane** wp 0.05%. • Spray Malathion @ 2 ml/L of water for control of fruit fly. (Spraying should not be done in rainy days)
Chilli	Flowering/ Fruiting	Thrips Mites	• If the leave develop crinkles and curl upwards, then apply **Carbofuran 3% G** @ 33 kg /ha or **Phorate 10 % G** @ 10 kg/ha or spray **Imidacloprid** 17.8 % SL @ 3.0 ml/ 10litre of water. • Spray Ethion @ 1.5ml or Rogor @ 2ml/L of water.
Khasi Mandarin	For bearing trees		• Apply fertilizer @ 350g Urea, 450g SSP & 200g MOP per tree. • Do mulching of basin with farm grasses.
		Trunk Borer	• Clean the bored holes of the infested trunk with iron wire and insert a cotton swab soaked in petrol or 5 ml of Dichlorvos 0.2% (2ml/l) and plug with mud.
Animal Sciences			
Poultry	All stages		• Deworming of poultry should be done regularly with single dose of **Fenbendazole** @ 5mg/kg body wt. in feed. • Broiler should be provided with Vitamin B complex @ 7ml per litre in drinking water daily. • Litter should be changed periodically to avoid dampness and prevent disease development like coccidiosis. • As a preventive measure against coccidiosis, provide coccidiostatic like **Amprolium** @ 25-65 mg/kg feed once a day. • During day time sufficient ventilation should be provided to reduce the relative humidity inside the shed.
Piggery	All stages		• Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. • In epidemic areas, vaccinate 6 months old pigs with FMD

			vaccine once in a year.

Suggestion: Contact nearby State Agril. Staff or KVK staff for necessary help and suggestion.



GRAMIN KRISHI MAUSAM SEWA

ICAR Research Complex for NEH Region

Umroi Road, Umiam – 793 103 Meghalaya

☎: Telephone No. : 0364 2570276 (O) Fax: 0364 2570213/Email: iaasbarapani@yahoo.in

RC (AE)/30/2011/ Bulletin/September'2014/48 Dated: 12/09/2014

Agro Advisory Bulletin – Ri- Bhoi

(Period 13th – 17th Sept, 2014)

Weather summery of the past three days (9th to 11th Sept, 2014)	Weather forecast valid up to 17th Sept, 2014
Sky was mainly clear to generally cloudy with moderate rainfall of **16.3mm**. Maximum temperatures ranged between 27-28.3°C and minimum ranged between 17.5-18.8°C. Mean relative humidity was 85-86% in morning and 77-80% in evening. Wind speed ranged between 1.3-1.6 kmph.	There is possibility of moderate rain in the next five days. Sky may be mainly clear to generally cloudy with a maximum and minimum temperature of 31-33°C & 22-23°C respectively. The expected relative humidity will be 96-97% (maximum) & 54-68% (minimum). Wind direction will be 168-188Degree at a speed of 3-5 kmph during the next five days.

Weekly cumulative rainfall :77.0mm

Agro meteorological Advisories for coming 5 days

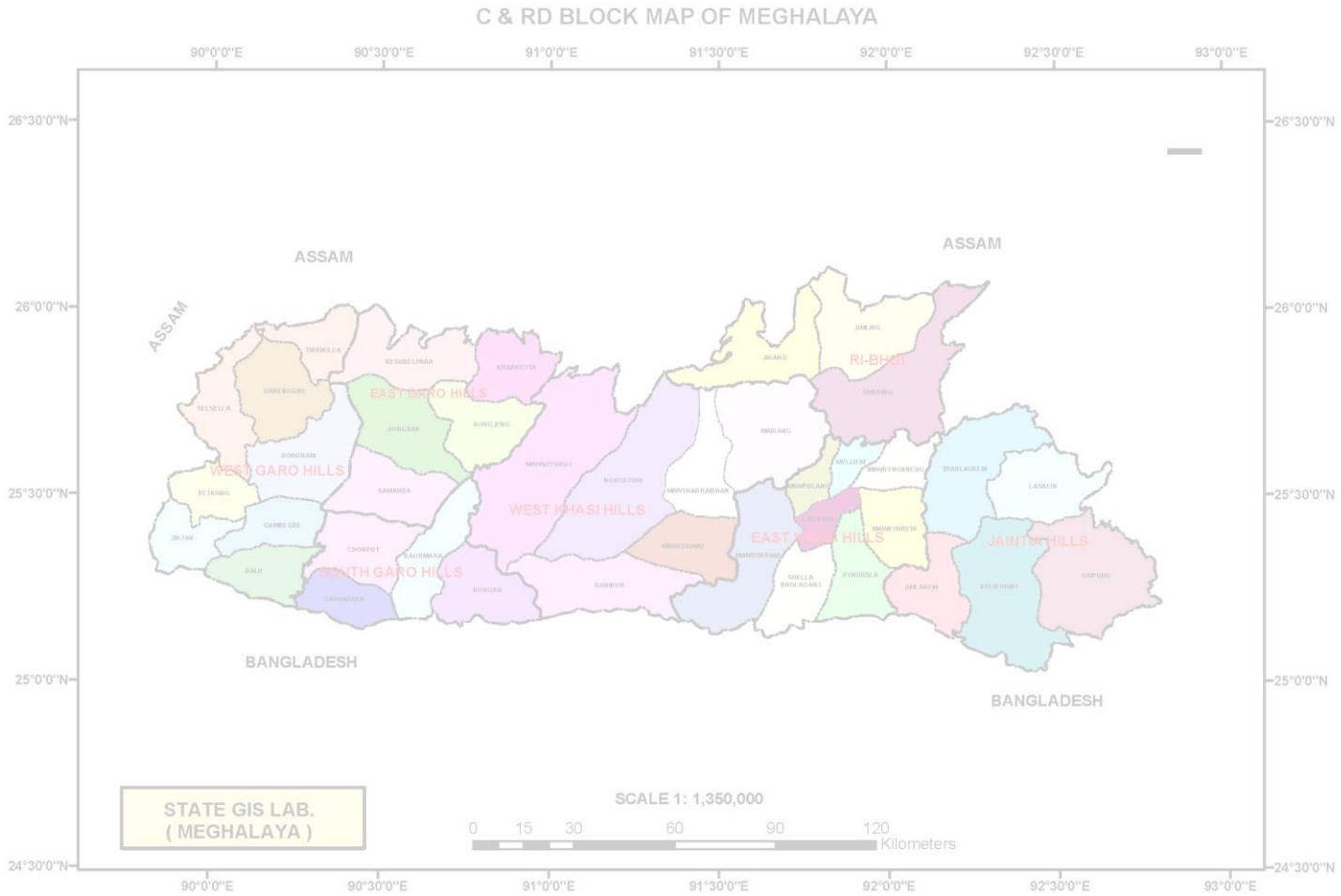
Main Crop/ Animal /Fisheries	Stage	Pest/Diseases	Agricultural Advisories
Sali/ Kharif Rice	Tillering to panicle initiation stage		• Repair bunds and keep free from weeds • Maintained a water level of 3-5 cm in the field and drain out excess water due to rains. • 1st top dressing of urea (44Kg/ha) should be done at tillering stage after 1st hand weeding or using cono-weeder.
Direct seeded Ahu	Tillering/Panicle initiation stage		• Do top dressing of 1/3rd urea (44Kg/ha) after 2nd hand weeding at 40-45 DAS. • Conserve water by repairing bunds.
		Blast	• Due to cloudy & high humidity, there is chance of incidence of blast. Spray Mencozeb @ 2g/litre or Carbendezime @1g/l if blast spots are seen after the current spells of rain.
		Thrips	• Farmers should keep vigilance against the attack of thrips and spray insecticide like Chloropyriphos @ 2ml/lit of water if moderate to high intensity is observed.
		Rice Gundhi bug/Stem borer	• Spray Malathion 5% dust @ 6.25kg/ha for Rice Gandhi bug and Chloropyriphos @0.02% or Monocrotophos @ 0.04% for stem borer.
Jhum Rice	Tillering to panicle initiation stage		• Bhalum 1, 2, 3; IRAT 109, IR 50 rice are in panicle initiation stage. • Keep the fields free from weeds.
Groundnut	Pod formation and development stage	Late leaf spot Rust Groundnut leaf miner/ Leaf folder	• Weather is congenial for development of late leaf spot. Spray carbendazim (0.05%) + mancozeb (0.2%) at 2- 3 weeks intervals. • Foliar application of aqueous neem leaf extract (2-5%) or mancozeb @ 0.3% should be done if chlorotic spots are seen on the upper part and orange colored pustules on the lower part of the leaf. • Foliar sprays with acephate 1 g/l or chlorpyriphos 2.5 ml/l or monocrotophos 1.6 ml/L.
Ginger/ Turmeric	Rhizome initiation stage		• Give one hand weeding followed by fertilizer application, earthing up and mulching.

			• Apply 81.4 kg/ha urea and 41.75 kg/ha MOP for ginger; for turmeric apply 65.1 kg/ha urea and 100.2 kg/ha MOP at 90 DAS. • Mulching can be done with locally available weed biomass, maize stalk, etc. • Avoid water logging as it causes rhizome rot and fungal disease development.
		Leaf Spot Rhizome rot (ginger)	• To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5weeks of sowing or Captan @ 1.5 g/l of water. • Spray/ drench 1% Bordeaux mixture or Dithane M-45 (2.5g/l) to prevent rhizome rot.
Potato	Land preparation		• Undertake land preparation for sowing of potato. • Apply 100q/ha FYM in furrows before planting. • Collect tuber seeds of HYVs like Kufri Joyti, Kufri Megha, Kufri Giriraj, Kufri Girdhari, Kufri Himsona, Kufri Himalini and keep ready for sowing.
Nursery Bed Preparation for vegetables (Cabbage, Cauliflower, Broccoli) ➢ Prepare raised nursery bed of height of 15 cm, 1m width and length of convenient length. ➢ Drench the nursery bed with Dithane M-45 @ 3g/m2 to prevent the incidence of damping off. ➢ Apply FYM @ 4-6 kg/m2 and mix well with the soil and leveled the bed. ➢ Make rows of 5 cm distance along the width of the bed with the help of bamboo stick. ➢ Sow the seeds at 1-2 cm deep in the line and covered with sieved FYM, sand and soil mixture. ➢ Covered the bed with dry grass/paddy straw or polythene to induce early germination & removed the coverage as soon as sprouts come out. ➢ Irrigate should be given daily. ➢ Transplant the seedlings 3-6 weeks old at proper spacing. ➢ Proper channels for draining excess water to avoid water logging.			
Cauliflower	Nursery preparation to transplanting		• Recommended variety: **Meghalaya Local** • Seed rate of 400-500g is required for transplanting of 1 ha. Transplant 3- 5 weeks old seedlings at a spacing of 60 cm row to row & 45cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) at the time of transplanting
Cabbage	Nursery preparation to transplanting		• Recommended variety: **H-139, Pride of India** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45 cm row to row & 30cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) & at the time of transplanting.
Broccoli	Nursery preparation to transplanting		• Recommended variety: **Puspa, Aiswarya** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45cm row to row & 30cm plant to plant. • Apply half dose of N (30 kg/ha urea), full dose of P (500 kg/ha SSP) and K (100 kg/ha MOP) at the time of transplanting.
Carrot	Sowing		• Recommended variety: **New Karoda, Nantesh** • Seed rate of 8-10g is required for transplanting of 1 ha. • Seeds should be soaked overnight before sowing. • Seeds can be sown either by broadcasting or in rows. Rows should be made at distance of 25cm apart and sow the seeds in the rows & later do thinning maintaining plant

			to plant distance of 5 cm. • Keep the soil moist by frequent light irrigation for proper growth of roots. • Apply half N (108.5 kg/ha urea) and full P (375 kg/ha SSP) and K (100.2 kg/ha MOP) as basal dose at the time of final land preparation.
Radish	Sowing		• Recommended variety: **Local genotype** • Seed rate of 8-10g is required for transplanting of 1 ha. • Prepare ridges of 20 cm at 30-45 cm distance & sow the seeds on ridges. • Thinning should be done maintaining plant to plant distance of 7-10 cm in a row soon after they are established. • Apply half dose of N (108.5 kg/ha urea), full dose of P (375 kg/ha SSP) & K (100kg/ha MOP) as basal. • Give irrigate immediately after sowing.
Laipatta	Nursery preparation		• Recommended variety: **Local** • Seed rate of 400-500g is required for transplanting of 1 ha.
French Bean	Sowing		• After harvesting the maize crop, take up French bean and utilize the stalk of maize for climbing. • Recommended variety: **Naga Local** • Seed rate of 20-25kg is required for 1 ha. • Maintained a spacing of 45 cm row to row & 15-20 cm plant to plant. • Fertilizer dose N: P: K - 60:60:40 kg/ha. Apply half dose of N (65kg/ha urea), full dose of P (375kg/ha SSP) & K (66.8kg/ha) at the time of sowing.
Bottle gourd & Ash gourd	Fruiting to harvesting	Powdery Mildew Fruit fly	• Spray **Bavistin** 0.1% or **Karathane** wp 0.05%. • Spray Malathion @ 2 ml/L of water for control of fruit fly. (Spraying should not be done in rainy days)
Chilli	Flowering/ Fruiting	Thrips Mites	• If the leave develop crinkles and curl upwards, then apply **Carbofuran 3% G** @ 33 kg /ha or **Phorate 10 % G** @ 10 kg/ha or spray **Imidacloprid** 17.8 % SL @ 3.0 ml/ 10litre of water. • Spray Ethion @ 1.5ml or Rogor @ 2ml/L of water.
Khasi Mandarin	For bearing trees		• Apply fertilizer @ 350g Urea, 450g SSP & 200g MOP per tree. • Do mulching of basin with farm grasses.
		Trunk Borer	• Clean the bored holes of the infested trunk with iron wire and insert a cotton swab soaked in petrol or 5 ml of Dichlorvos 0.2% (2ml/l) and plug with mud.
Animal Sciences			
Poultry	All stages		• Deworming of poultry should be done regularly with single dose of **Fenbendazole** @ 5mg/kg body wt. in feed. • Broiler should be provided with Vitamin B complex @ 7ml per litre in drinking water daily. • Litter should be changed periodically to avoid dampness and prevent disease development like coccidiosis. • As a preventive measure against coccidiosis, provide coccidiostatic like **Amprolium** @ 25-65 mg/kg feed once a day. • During day time sufficient ventilation should be provided to reduce the relative humidity inside the shed.
Piggery	All stages		• Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose.

			• In epidemic areas, vaccinate 6 months old pigs with FMD vaccine once in a year.

Suggestion: Contact nearby State Agril. Staff or KVK staff for necessary help and suggestion.



GRAMIN KRISHI MAUSAM SEWA

ICAR Research Complex for NEH Region
Umroi Road, Umiam – 793 103 Meghalaya

☎: Telephone No. : 0364 2570276 (O) Fax: 0364 2570213/Email: iaasbarapani@yahoo.in

RC (AE)/30/2011/ Bulletin/September'2014/48 Dated: 12/09/2014

Agro Advisory Bulletin – South Garo Hills
(Period 13th – 17th Sept, 2014)

Weather summery of the past three days (9th to 11th Sept, 2014)	Weather forecast valid up to 17th Sept, 2014
Sky was mainly clear to generally cloudy with moderate rainfall of **16.3mm**. Maximum temperatures ranged between 27-28.3°C and minimum ranged between 17.5-18.8°C. Mean relative humidity was 85-86% in morning and 77-80% in evening. Wind speed ranged between 1.3-1.6 kmph.	There is possibility of moderate rain in the next five days. Sky may be partly cloudy to generally cloudy with a maximum and minimum temperature of 34°C & 25-26°C respectively. The expected relative humidity will be 93-95% (maximum) & 60-62% (minimum). Wind direction will be 124-152Degree at a speed of 4-6 kmph during the next five days.

Weekly cumulative rainfall :80.0mm

Agro meteorological Advisories for coming 5 days

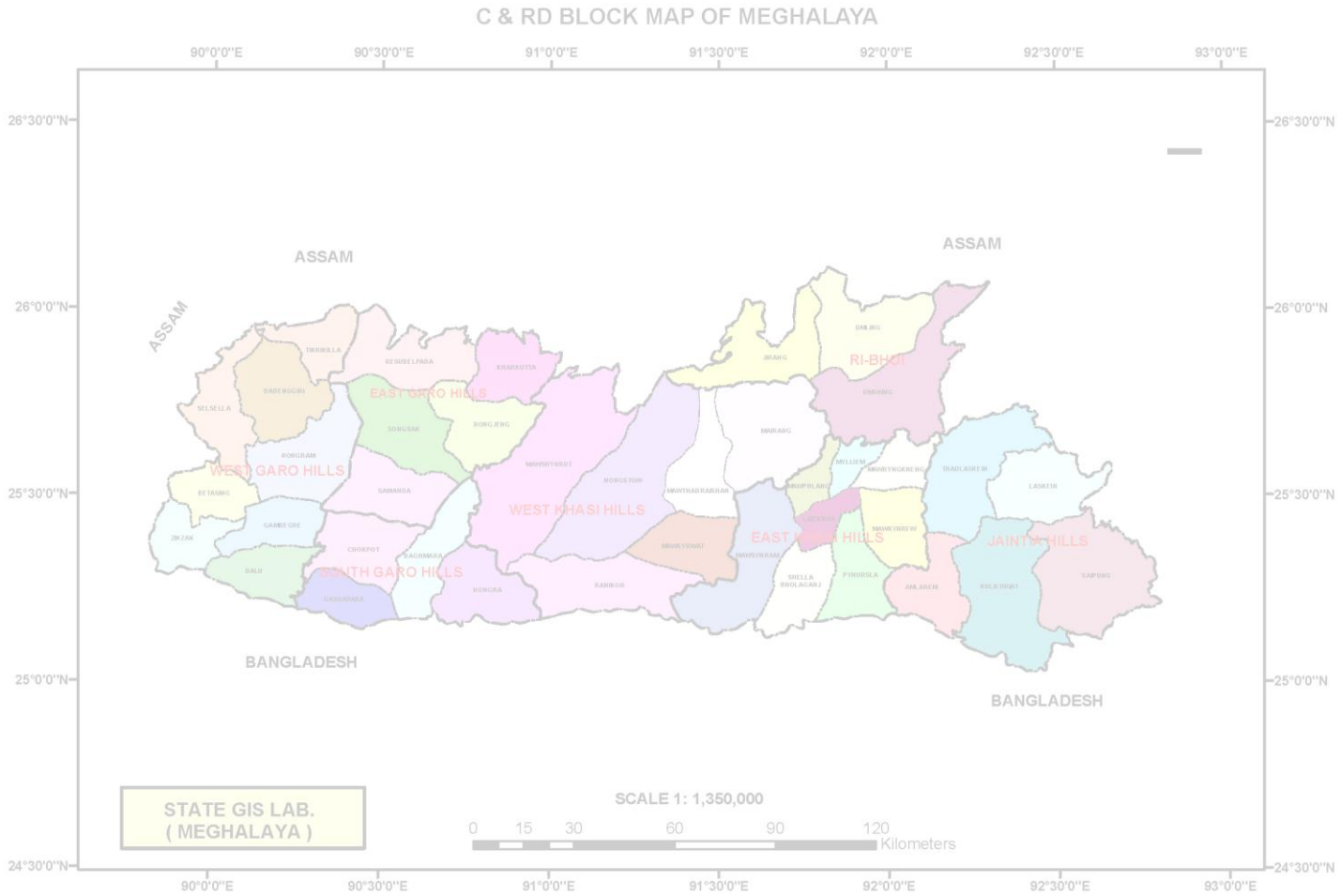
Main Crop/ Animal /Fisheries	Stage	Pest/Diseases	Agricultural Advisories
Sali/ Kharif Rice	Tillering to panicle initiation stage		• Repair bunds and keep free from weeds • Maintained a water level of 3-5 cm in the field and drain out excess water due to rains. • 1st top dressing of urea (44Kg/ha) should be done at tillering stage after 1st hand weeding or using cono-weeder.
Direct seeded Ahu	Tillering/Panicle initiation stage		• Do top dressing of 1/3rd urea (44Kg/ha) after 2nd hand weeding at 40-45 DAS. • Conserve water by repairing bunds.
		Blast	• Due to cloudy & high humidity, there is chance of incidence of blast. Spray Mencozeb @ 2g/litre or Carbendezime @1g/l if blast spots are seen after the current spells of rain.
		Thrips	• Farmers should keep vigilance against the attack of thrips and spray insecticide like Chloropyriphos @ 2ml/lit of water if moderate to high intensity is observed.
		Rice Gundhi bug/Stem borer	• Spray Malathion 5% dust @ 6.25kg/ha for Rice Gandhi bug and Chloropyriphos @0.02% or Monocrotophos @ 0.04% for stem borer.
Jhum Rice	Tillering to panicle initiation stage		• Bhalum 1, 2, 3; IRAT 109, IR 50 rice are in panicle initiation stage. • Keep the fields free from weeds.
Groundnut	Pod formation and development satge	Late leaf spot Rust Groundnut leaf miner/ Leaf folder	• Weather is congenial for development of late leaf spot. Spray carbendazim (0.05%) + mancozeb (0.2%) at 2- 3 weeks intervals. • Foliar application of aqueous neem leaf extract (2-5%) or mancozeb @ 0.3% should be done if chlorotic spots are seen on the upper part and orange colored pustules on the lower part of the leaf. • Foliar sprays with acephate 1 g/l or chlorpyriphos 2.5 ml/l or monocrotophos 1.6 ml/L.
Ginger/ Turmeric	Rhizome initiation stage		• Give one hand weeding followed by fertilizer application, earthing up and mulching. • Apply 81.4 kg/ha urea and 41.75 kg/ha MOP for ginger;

			for turmeric apply 65.1 kg/ha urea and 100.2 kg/ha MOP at 90 DAS. • Mulching can be done with locally available weed biomass, maize stalk, etc. • Avoid water logging as it causes rhizome rot and fungal disease development.
		Leaf Spot Rhizome rot (ginger)	• To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5weeks of sowing or Captan @ 1.5 g/l of water. • Spray/ drench 1% Bordeaux mixture or Dithane M-45 (2.5g/l) to prevent rhizome rot.
Potato	Land preparation		• Undertake land preparation for sowing of potato. • Apply 100q/ha FYM in furrows before planting. • Collect tuber seeds of HYVs like Kufri Joyti, Kufri Megha, Kufri Giriraj, Kufri Girdhari, Kufri Himsona, Kufri Himalini and keep ready for sowing.
Nursery Bed Preparation for vegetables (Cabbage, Cauliflower, Broccoli) ➢ Prepare raised nursery bed of height of 15 cm, 1m width and length of convenient length. ➢ Drench the nursery bed with Dithane M-45 @ 3g/m^2 to prevent the incidence of damping off. ➢ Apply FYM @ 4-6 kg/m^2 and mix well with the soil and leveled the bed. ➢ Make rows of 5 cm distance along the width of the bed with the help of bamboo stick. ➢ Sow the seeds at 1-2 cm deep in the line and covered with sieved FYM, sand and soil mixture. ➢ Covered the bed with dry grass/paddy straw or polythene to induce early germination & removed the coverage as soon as sprouts come out. ➢ Irrigate should be given daily. ➢ Transplant the seedlings 3-6 weeks old at proper spacing. ➢ Proper channels for draining excess water to avoid water logging.			
Cauliflower	Nursery preparation to transplanting		• Recommended variety: **Meghalaya Local** • Seed rate of 400-500g is required for transplanting of 1 ha. Transplant 3- 5 weeks old seedlings at a spacing of 60 cm row to row & 45cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) at the time of transplanting
Cabbage	Nursery preparation to transplanting		• Recommended variety: **H-139, Pride of India** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45 cm row to row & 30cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) & at the time of transplanting.
Broccoli	Nursery preparation to transplanting		• Recommended variety: **Puspa, Aiswarya** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45cm row to row & 30cm plant to plant. • Apply half dose of N (30 kg/ha urea), full dose of P (500 kg/ha SSP) and K (100 kg/ha MOP) at the time of transplanting.
Carrot	Sowing		• Recommended variety: **New Karoda, Nantesh** • Seed rate of 8-10g is required for transplanting of 1 ha. • Seeds should be soaked overnight before sowing. • Seeds can be sown either by broadcasting or in rows. Rows should be made at distance of 25cm apart and sow the seeds in the rows & later do thinning maintaining plant to plant distance of 5 cm.

			• Keep the soil moist by frequent light irrigation for proper growth of roots. • Apply half N (108.5 kg/ha urea) and full P (375 kg/ha SSP) and K (100.2 kg/ha MOP) as basal dose at the time of final land preparation.
Radish	Sowing		• Recommended variety: **Local genotype** • Seed rate of 8-10g is required for transplanting of 1 ha. • Prepare ridges of 20 cm at 30-45 cm distance & sow the seeds on ridges. • Thinning should be done maintaining plant to plant distance of 7-10 cm in a row soon after they are established. • Apply half dose of N (108.5 kg/ha urea), full dose of P (375 kg/ha SSP) & K (100kg/ha MOP) as basal. • Give irrigate immediately after sowing.
Laipatta	Nursery preparation		• Recommended variety: **Local** • Seed rate of 400-500g is required for transplanting of 1 ha.
French Bean	Sowing		• After harvesting the maize crop, take up French bean and utilize the stalk of maize for climbing. • Recommended variety: **Naga Local** • Seed rate of 20-25kg is required for 1 ha. • Maintained a spacing of 45 cm row to row & 15-20 cm plant to plant. • Fertilizer dose N: P: K - 60:60:40 kg/ha. Apply half dose of N (65kg/ha urea), full dose of P (375kg/ha SSP) & K (66.8kg/ha) at the time of sowing.
Bottle gourd & Ash gourd	Fruiting to harvesting	Powdery Mildew Fruit fly	• Spray **Bavistin** 0.1% or **Karathane** wp 0.05%. • Spray Malathion @ 2 ml/L of water for control of fruit fly. (Spraying should not be done in rainy days)
Chilli	Flowering/ Fruiting	Thrips Mites	• If the leave develop crinkles and curl upwards, then apply **Carbofuran 3% G** @ 33 kg /ha or **Phorate 10 % G** @ 10 kg/ha or spray **Imidacloprid** 17.8 % SL @ 3.0 ml/ 10litre of water. • Spray Ethion @ 1.5ml or Rogor @ 2ml/L of water.
Khasi Mandarin	For bearing trees		• Apply fertilizer @ 350g Urea, 450g SSP & 200g MOP per tree. • Do mulching of basin with farm grasses.
		Trunk Borer	• Clean the bored holes of the infested trunk with iron wire and insert a cotton swab soaked in petrol or 5 ml of Dichlorvos 0.2% (2ml/l) and plug with mud
Animal Sciences			
Poultry	All stages		• Deworming of poultry should be done regularly with single dose of **Fenbendazole** @ 5mg/kg body wt. in feed. • Broiler should be provided with Vitamin B complex @ 7ml per litre in drinking water daily. • Litter should be changed periodically to avoid dampness and prevent disease development like coccidiosis. • As a preventive measure against coccidiosis, provide coccidiostatic like **Amprolium** @ 25-65 mg/kg feed once a day. • During day time sufficient ventilation should be provided to reduce the relative humidity inside the shed.
Piggery	All stages		• Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. • In epidemic areas, vaccinate 6 months old pigs with FMD

			vaccine once in a year.

Suggestion: Contact nearby State Agril. Staff or KVK staff for necessary help and suggestion.



GRAMIN KRISHI MAUSAM SEWA
ICAR Research Complex for NEH Region
Umroi Road, Umiam – 793 103 Meghalaya
☎: Telephone No. : 0364 2570276 (O) Fax: 0364 2570213/Email: iaasbarapani@yahoo.in

RC (AE)/30/2011/ Bulletin/September'2014/48 Dated: 12/09/2014

Agro Advisory Bulletin – West Garo Hills
(Period 13th – 17th Sept, 2014)

Weather summery of the past three days (9th to 11th Sept, 2014)	Weather forecast valid up to 17th Sept, 2014
Sky was mainly clear to generally cloudy with moderate rainfall of **16.3mm**. Maximum temperatures ranged between 27-28.3°C and minimum ranged between 17.5-18.8°C. Mean relative humidity was 85-86% in morning and 77-80% in evening. Wind speed ranged between 1.3-1.6 kmph.	There is possibility of moderate rain in the next five days. Sky may be partly cloudy to generally cloudy with a maximum and minimum temperature of 32-33°C & 24-25°C respectively. The expected relative humidity will be 95-97% (maximum) & 65-70% (minimum). Wind direction will be 137-164Degree at a speed of 4-7 kmph during the next five days.

Weekly cumulative rainfall :117.0mm

Agro meteorological Advisories for coming 5 days

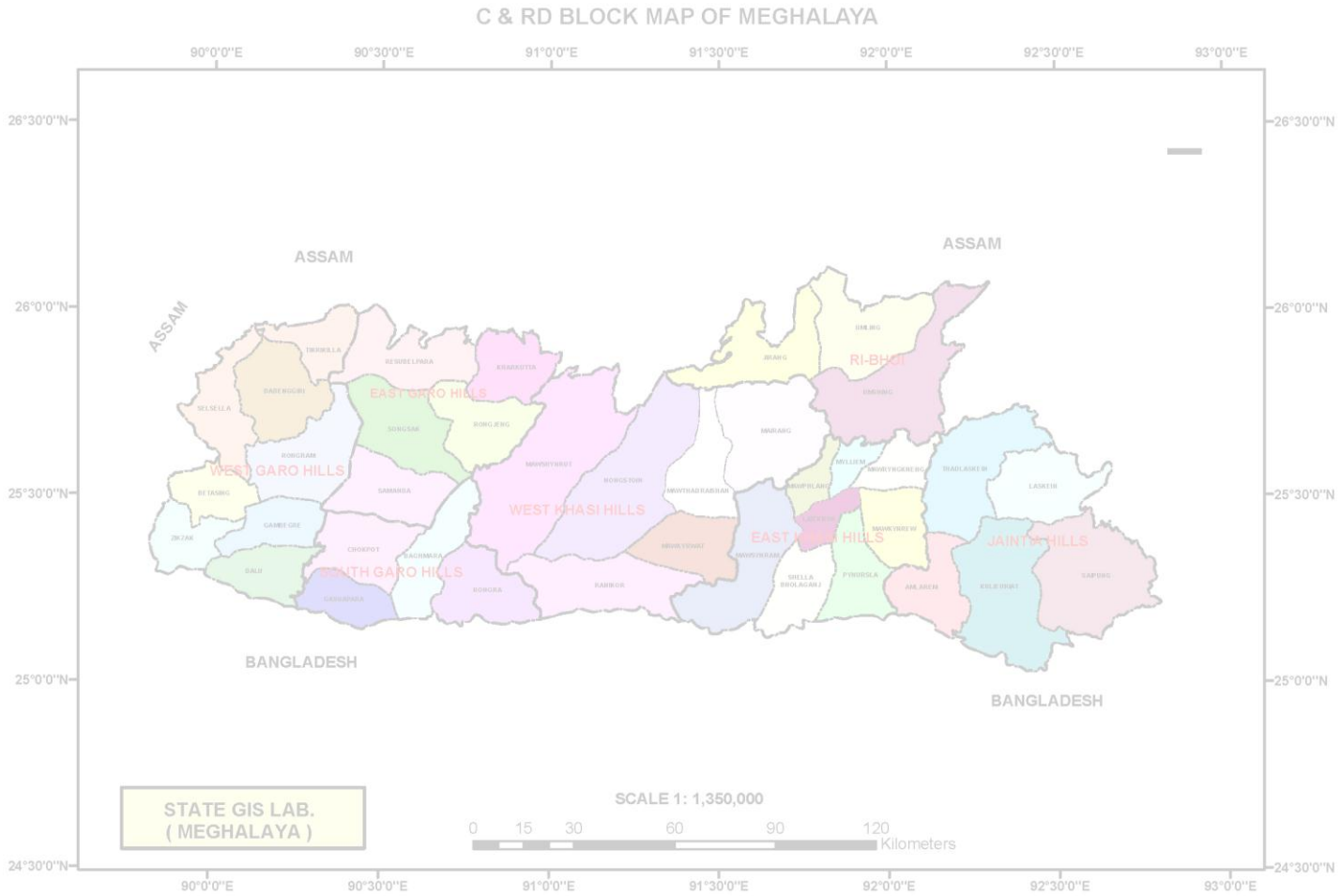
Main Crop/ Animal /Fisheries	Stage	Pest/Diseases	Agricultural Advisories
Sali/ Kharif Rice	Tillering to panicle initiation stage		• Repair bunds and keep free from weeds • Maintained a water level of 3-5 cm in the field and drain out excess water due to rains. • 1st top dressing of urea (44Kg/ha) should be done at tillering stage after 1st hand weeding or using cono-weeder.
Direct seeded Ahu	Tillering/Panicle initiation stage		• Do top dressing of 1/3rd urea (44Kg/ha) after 2nd hand weeding at 40-45 DAS. • Conserve water by repairing bunds.
		Blast	• Due to cloudy & high humidity, there is chance of incidence of blast. Spray Mencozeb @ 2g/litre or Carbendezime @1g/l if blast spots are seen after the current spells of rain.
		Thrips	• Farmers should keep vigilance against the attack of thrips and spray insecticide like Chloropyriphos @ 2ml/lit of water if moderate to high intensity is observed.
		Rice Gundhi bug/Stem borer	• Spray Malathion 5% dust @ 6.25kg/ha for Rice Gandhi bug and Chloropyriphos @0.02% or Monocrotophos @ 0.04% for stem borer.
Jhum Rice	Tillering to panicle initiation stage		• Bhalum 1, 2, 3; IRAT 109, IR 50 rice are in panicle initiation stage. • Keep the fields free from weeds.
Groundnut	Pod formation and development stage	Late leaf spot Rust Groundnut leaf miner/ Leaf folder	• Weather is congenial for development of late leaf spot. Spray carbendazim (0.05%) + mancozeb (0.2%) at 2- 3 weeks intervals. • Foliar application of aqueous neem leaf extract (2-5%) or mancozeb @ 0.3%, should be done if chlorotic spots are seen on the upper part and orange colored pustules on the lower part of the leaf. • Foliar sprays with acephate 1 g/l or chlorpyriphos 2.5 ml/l or monocrotophos 1.6 ml/L.
Ginger/ Turmeric	Rhizome initiation stage		• Give one hand weeding followed by fertilizer application, earthing up and mulching. • Apply 81.4 kg/ha urea and 41.75 kg/ha MOP for ginger;

			for turmeric apply 65.1 kg/ha urea and 100.2 kg/ha MOP at 90 DAS. • Mulching can be done with locally available weed biomass, maize stalk, etc. • Avoid water logging as it causes rhizome rot and fungal disease development.
		Leaf Spot Rhizome rot (ginger)	• To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5weeks of sowing or Captan @ 1.5 g/l of water. • Spray/ drench 1% Bordeaux mixture or Dithane M-45 (2.5g/l) to prevent rhizome rot.
Potato	Land preparation		• Undertake land preparation for sowing of potato. • Apply 100q/ha FYM in furrows before planting. • Collect tuber seeds of HYVs like Kufri Joyti, Kufri Megha, Kufri Giriraj, Kufri Girdhari, Kufri Himsona, Kufri Himalini and keep ready for sowing.
Nursery Bed Preparation for vegetables (Cabbage, Cauliflower, Broccoli) ➢ Prepare raised nursery bed of height of 15 cm, 1m width and length of convenient length. ➢ Drench the nursery bed with Dithane M-45 @ 3g/m2 to prevent the incidence of damping off. ➢ Apply FYM @ 4-6 kg/m2 and mix well with the soil and leveled the bed. ➢ Make rows of 5 cm distance along the width of the bed with the help of bamboo stick. ➢ Sow the seeds at 1-2 cm deep in the line and covered with sieved FYM, sand and soil mixture. ➢ Covered the bed with dry grass/paddy straw or polythene to induce early germination & removed the coverage as soon as sprouts come out. ➢ Irrigate should be given daily. ➢ Transplant the seedlings 3-6 weeks old at proper spacing. ➢ Proper channels for draining excess water to avoid water logging.			
Cauliflower	Nursery preparation to transplanting		• Recommended variety: **Meghalaya Local** • Seed rate of 400-500g is required for transplanting of 1 ha. Transplant 3- 5 weeks old seedlings at a spacing of 60 cm row to row & 45cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) at the time of transplanting
Cabbage	Nursery preparation to transplanting		• Recommended variety: **H-139, Pride of India** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45 cm row to row & 30cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) & at the time of transplanting.
Broccoli	Nursery preparation to transplanting		• Recommended variety: **Puspa, Aiswarya** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45cm row to row & 30cm plant to plant. • Apply half dose of N (30 kg/ha urea), full dose of P (500 kg/ha SSP) and K (100 kg/ha MOP) at the time of transplanting.
Carrot	Sowing		• Recommended variety: **New Karoda, Nantesh** • Seed rate of 8-10g is required for transplanting of 1 ha. • Seeds should be soaked overnight before sowing. • Seeds can be sown either by broadcasting or in rows. Rows should be made at distance of 25cm apart and sow the seeds in the rows & later do thinning maintaining

			plant to plant distance of 5 cm. • Keep the soil moist by frequent light irrigation for proper growth of roots. • Apply half N (108.5 kg/ha urea) and full P (375 kg/ha SSP) and K (100.2 kg/ha MOP) as basal dose at the time of final land preparation.
Radish	Sowing		• Recommended variety: **Local genotype** • Seed rate of 8-10g is required for transplanting of 1 ha. • Prepare ridges of 20 cm at 30-45 cm distance & sow the seeds on ridges. • Thinning should be done maintaining plant to plant distance of 7-10 cm in a row soon after they are established. • Apply half dose of N (108.5 kg/ha urea), full dose of P (375 kg/ha SSP) & K (100kg/ha MOP) as basal. • Give irrigate immediately after sowing.
Laipatta	Nursery preparation		• Recommended variety: **Local** • Seed rate of 400-500g is required for transplanting of 1 ha.
French Bean	Sowing		• After harvesting the maize crop, take up French bean and utilize the stalk of maize for climbing. • Recommended variety: **Naga Local** • Seed rate of 20-25kg is required for 1 ha. • Maintained a spacing of 45 cm row to row & 15-20 cm plant to plant. • Fertilizer dose N: P: K - 60:60:40 kg/ha. Apply half dose of N (65kg/ha urea), full dose of P (375kg/ha SSP) & K (66.8kg/ha) at the time of sowing.
Bottle gourd & Ash gourd	Fruiting to harvesting	Powdery Mildew Fruit fly	• Spray **Bavistin** 0.1% or **Karathane** wp 0.05%. • Spray Malathion @ 2 ml/L of water for control of fruit fly. (Spraying should not be done in rainy days)
Chilli	Flowering/ Fruiting	Thrips Mites	• If the leave develop crinkles and curl upwards, then apply **Carbofuran 3% G** @ 33 kg /ha or **Phorate 10 % G** @ 10 kg/ha or spray **Imidacloprid** 17.8 % SL @ 3.0 ml/ 10litre of water. • Spray Ethion @ 1.5ml or Rogor @ 2ml/L of water.
Khasi Mandarin	For bearing trees		• Apply fertilizer @ 350g Urea, 450g SSP & 200g MOP per tree. • Do mulching of basin with farm grasses.
		Trunk Borer	• Clean the bored holes of the infested trunk with iron wire and insert a cotton swab soaked in petrol or 5 ml of Dichlorvos 0.2% (2ml/l) and plug with mud
Animal Sciences			
Poultry	All stages		• Deworming of poultry should be done regularly with single dose of **Fenbendazole** @ 5mg/kg body wt. in feed. • Broiler should be provided with Vitamin B complex @ 7ml per litre in drinking water daily. • Litter should be changed periodically to avoid dampness and prevent disease development like coccidiosis. • As a preventive measure against coccidiosis, provide coccidiostatic like **Amprolium** @ 25-65 mg/kg feed once a day. • During day time sufficient ventilation should be

			provided to reduce the relative humidity inside the shed.
Piggery	All stages		• Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. • In epidemic areas, vaccinate 6 months old pigs with FMD vaccine once in a year.

Suggestion: Contact nearby State Agril. Staff or KVK staff for necessary help and suggestion.



GRAMIN KRISHI MAUSAM SEWA

ICAR Research Complex for NEH Region
Umroi Road, Umiam – 793 103 Meghalaya

☎: Telephone No. : 0364 2570276 (O) Fax: 0364 2570213/Email: iaasbarapani@yahoo.in

RC (AE)/30/2011/ Bulletin/September'2014/48 Dated: 12/09/2014

Agro Advisory Bulletin – West Khasi Hills
(Period 13th – 17th Sept, 2014)

Weather summery of the past three days (9th to 11th Sept, 2014)	Weather forecast valid up to 17th Sept, 2014
Sky was mainly clear to generally cloudy with moderate rainfall of **16.3mm**. Maximum temperatures ranged between 27-28.3°C and minimum ranged between 17.5-18.8°C. Mean relative humidity was 85-86% in morning and 77-80% in evening. Wind speed ranged between 1.3-1.6 kmph.	There is possibility of light to moderate rain in the next five days. Sky may be mainly clear to partly cloudy with a maximum and minimum temperature of 23-24°C & 15°C respectively. The expected relative humidity will be 93-94% (maximum) & 55-61% (minimum). Wind direction will be 124-153Degree at a speed of 3-5 kmph during the next five days.
	Weekly cumulative rainfall :109.0mm

Agro meteorological Advisories for coming 5 days

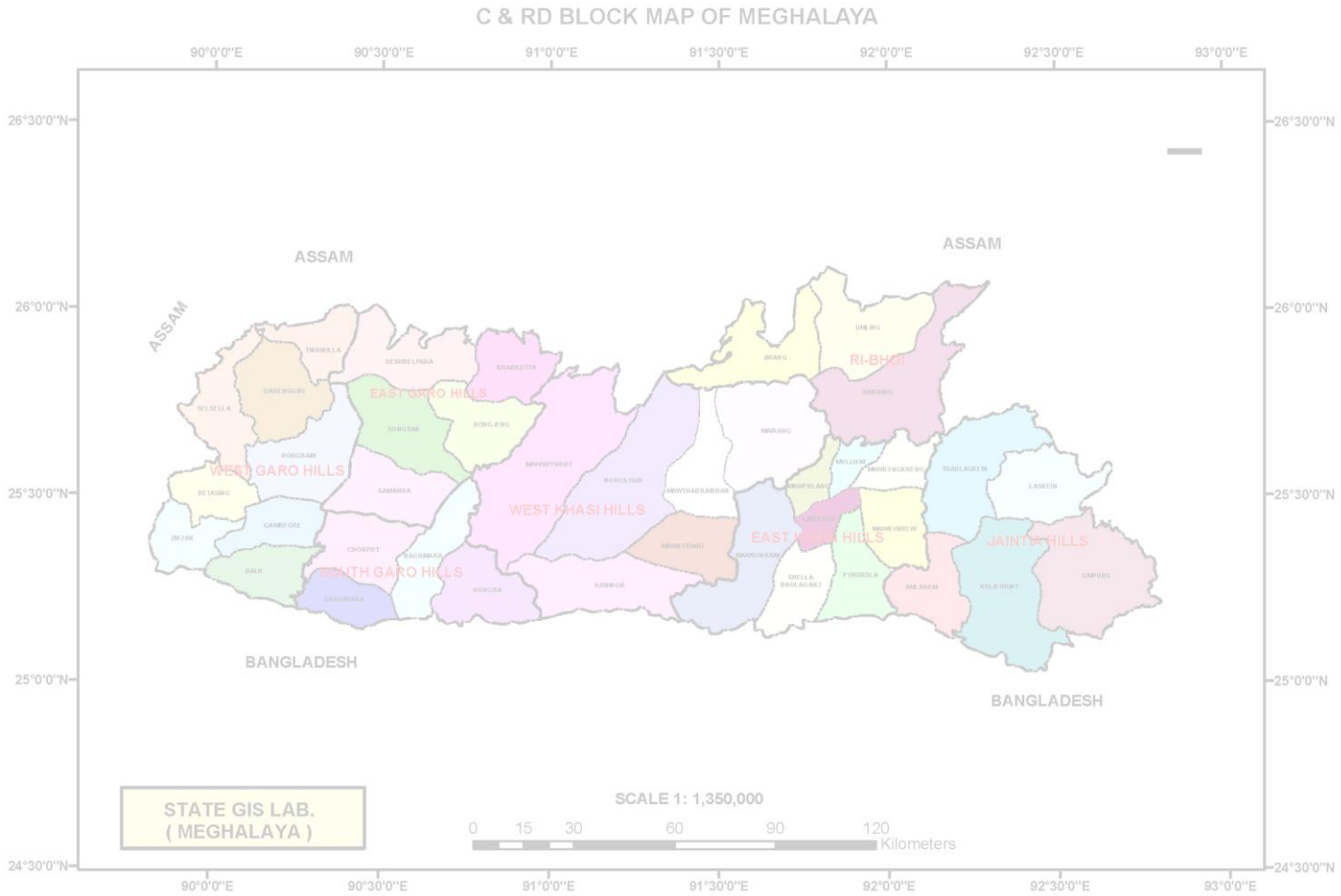
Main Crop/ Animal /Fisheries	Stage	Pest/Diseases	Agricultural Advisories
Sali/ Kharif Rice	Tillering to panicle initiation stage		• Repair bunds and keep free from weeds • Maintained a water level of 3-5 cm in the field and drain out excess water due to rains. • 1st top dressing of urea (44Kg/ha) should be done at tillering stage after 1st hand weeding or using cono-weeder.
Direct seeded Ahu	Tillering/Panicle initiation stage		• Do top dressing of 1/3rd urea (44Kg/ha) after 2nd hand weeding at 40-45 DAS. • Conserve water by repairing bunds.
		Blast	• Due to cloudy & high humidity, there is chance of incidence of blast. Spray Mencozeb @ 2g/litre or Carbendezime @1g/l if blast spots are seen after the current spells of rain.
		Thrips	• Farmers should keep vigilance against the attack of thrips and spray insecticide like Chloropyriphos @ 2ml/lit of water if moderate to high intensity is observed.
		Rice Gundhi bug/Stem borer	• Spray Malathion 5% dust @ 6.25kg/ha for Rice Gandhi bug and Chloropyriphos @0.02% or Monocrotophos @ 0.04% for stem borer.
Jhum Rice	Tillering to panicle initiation stage		• Bhalum 1, 2, 3; IRAT 109, IR 50 rice are in panicle initiation stage. • Keep the fields free from weeds.
Groundnut	Pod formation and development stage	Late leaf spot Rust Groundnut leaf miner/ Leaf folder	• Weather is congenial for development of late leaf spot. Spray carbendazim (0.05%) + mancozeb (0.2%) at 2- 3 weeks intervals from the appearance of dark brown spot. • Foliar application of aqueous neem leaf extract (2-5%) or mancozeb @ 0.3% should be done if chlorotic spots are seen on the upper part and orange colored pustules on the lower part of the leaf. • Foliar sprays with acephate 1 g/l or chlorpyriphos 2.5 ml/l or monocrotophos 1.6 ml/L.
Ginger/ Turmeric	Rhizome initiation stage		• Give one hand weeding followed by fertilizer application, earthing up and mulching.

			• Apply 81.4 kg/ha urea and 41.75 kg/ha MOP for ginger; for turmeric apply 65.1 kg/ha urea and 100.2 kg/ha MOP at 90 DAS. • Mulching can be done with locally available weed biomass, maize stalk, etc. • Avoid water logging as it causes rhizome rot and fungal disease development.
		Leaf Spot Rhizome rot (ginger)	• To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5weeks of sowing or Captan @ 1.5 g/l of water. • Spray/ drench 1% Bordeaux mixture or Dithane M-45 (2.5g/l) to prevent rhizome rot.
Potato	Land preparation		• Undertake land preparation for sowing of potato. • Apply 100q/ha FYM in furrows before planting. • Collect tuber seeds of HYVs like Kufri Joyti, Kufri Megha, Kufri Giriraj, Kufri Girdhari, Kufri Himsona, Kufri Himalini and keep ready for sowing.
Nursery Bed Preparation for vegetables (Cabbage, Cauliflower, Broccoli) ➢ Prepare raised nursery bed of height of 15 cm, 1m width and length of convenient length. ➢ Drench the nursery bed with Dithane M-45 @ 3g/m2 to prevent the incidence of damping off. ➢ Apply FYM @ 4-6 kg/m2 and mix well with the soil and leveled the bed. ➢ Make rows of 5 cm distance along the width of the bed with the help of bamboo stick. ➢ Sow the seeds at 1-2 cm deep in the line and covered with sieved FYM, sand and soil mixture. ➢ Covered the bed with dry grass/paddy straw or polythene to induce early germination & removed the coverage as soon as sprouts come out. ➢ Irrigate should be given daily. ➢ Transplant the seedlings 3-6 weeks old at proper spacing. ➢ Proper channels for draining excess water to avoid water logging.			
Cauliflower	Nursery preparation to transplanting		• Recommended variety: **Meghalaya Local** • Seed rate of 400-500g is required for transplanting of 1 ha. Transplant 3- 5 weeks old seedlings at a spacing of 60 cm row to row & 45cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) at the time of transplanting
Cabbage	Nursery preparation to transplanting		• Recommended variety: **H-139, Pride of India** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45 cm row to row & 30cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) & at the time of transplanting.
Broccoli	Nursery preparation to transplanting		• Recommended variety: **Puspa, Aiswarya** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45cm row to row & 30cm plant to plant. • Apply half dose of N (30 kg/ha urea), full dose of P (500 kg/ha SSP) and K (100 kg/ha MOP) at the time of transplanting.
Carrot	Sowing		• Recommended variety: **New Karoda, Nantesh** • Seed rate of 8-10g is required for transplanting of 1 ha. • Seeds should be soaked overnight before sowing. • Seeds can be sown either by broadcasting or in rows. Rows should be made at distance of 25cm apart and sow the seeds in the rows & later do thinning maintaining plant

			to plant distance of 5 cm. • Keep the soil moist by frequent light irrigation for proper growth of roots. • Apply half N (108.5 kg/ha urea) and full P (375 kg/ha SSP) and K (100.2 kg/ha MOP) as basal dose at the time of final land preparation.
Radish	Sowing		• Recommended variety: **Local genotype** • Seed rate of 8-10g is required for transplanting of 1 ha. • Prepare ridges of 20 cm at 30-45 cm distance & sow the seeds on ridges. • Thinning should be done maintaining plant to plant distance of 7-10 cm in a row soon after they are established. • Apply half dose of N (108.5 kg/ha urea), full dose of P (375 kg/ha SSP) & K (100kg/ha MOP) as basal. • Give irrigate immediately after sowing.
Laipatta	Nursery preparation		• Recommended variety: **Local** • Seed rate of 400-500g is required for transplanting of 1 ha.
French Bean	Sowing		• After harvesting the maize crop, take up French bean and utilize the stalk of maize for climbing. • Recommended variety: **Naga Local** • Seed rate of 20-25kg is required for 1 ha. • Maintained a spacing of 45 cm row to row & 15-20 cm plant to plant. • Fertilizer dose N: P: K - 60:60:40 kg/ha. Apply half dose of N (65kg/ha urea), full dose of P (375kg/ha SSP) & K (66.8kg/ha) at the time of sowing.
Bottle gourd & Ash gourd	Fruiting to harvesting	Powdery Mildew Fruit fly	• Spray **Bavistin** 0.1% or **Karathane** wp 0.05%. • Spray Malathion @ 2 ml/L of water for control of fruit fly. (Spraying should not be done in rainy days)
Chilli	Flowering/ Fruiting	Thrips Mites	• If the leave develop crinkles and curl upwards, then apply **Carbofuran 3% G** @ 33 kg /ha or **Phorate 10 % G** @ 10 kg/ha or spray **Imidacloprid** 17.8 % SL @ 3.0 ml/ 10litre of water. • Spray Ethion @ 1.5ml or Rogor @ 2ml/L of water.
Khasi Mandarin	For bearing trees		• Apply fertilizer @ 350g Urea, 450g SSP & 200g MOP per tree. • Do mulching of basin with farm grasses.
		Trunk Borer	• Clean the bored holes of the infested trunk with iron wire and insert a cotton swab soaked in petrol or 5 ml of Dichlorvos 0.2% (2ml/l) and plug with mud
Animal Sciences			
Poultry	All stages		• Deworming of poultry should be done regularly with single dose of **Fenbendazole** @ 5mg/kg body wt. in feed. • Broiler should be provided with Vitamin B complex @ 7ml per litre in drinking water daily. • Litter should be changed periodically to avoid dampness and prevent disease development like coccidiosis. • As a preventive measure against coccidiosis, provide coccidiostatic like **Amprolium** @ 25-65 mg/kg feed once a day. • During day time sufficient ventilation should be provided to reduce the relative humidity inside the shed.
Piggery	All stages		• Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose.

			• In epidemic areas, vaccinate 6 months old pigs with FMD vaccine once in a year.

Suggestion: Contact nearby State Agril. Staff or KVK staff for necessary help and suggestion.



GRAMIN KRISHI MAUSAM SEWA
ICAR Research Complex for NEH Region
Umroi Road, Umiam – 793 103 Meghalaya
☎: Telephone No. : 0364 2570276 (O) Fax: 0364 2570213/Email: iaasbarapani@yahoo.in

RC (AE)/30/2011/ Bulletin/September'2014/48 Dated: 12/09/2014

Agro Advisory Bulletin – East Garo Hills
(Period 13th – 17th Sept, 2014)

Weather summery of the past three days (9th to 11th Sept, 2014)	Weather forecast valid up to 17th Sept, 2014
Sky was mainly clear to generally cloudy with moderate rainfall of **16.3mm**. Maximum temperatures ranged between 27-28.3°C and minimum ranged between 17.5-18.8°C. Mean relative humidity was 85-86% in morning and 77-80% in evening. Wind speed ranged between 1.3-1.6 kmph.	There is possibility of moderate rain in the next five days. Sky may be generally cloudy with a maximum and minimum temperature of 29-33°C & 23-24°C respectively. The expected relative humidity will be 87-94% (maximum) & 62-69% (minimum). Wind direction will be 167-227Degree at a speed of 4-6 kmph during the next five days.
	Weekly cumulative rainfall :112.0mm

Agro meteorological Advisories for coming 5 days

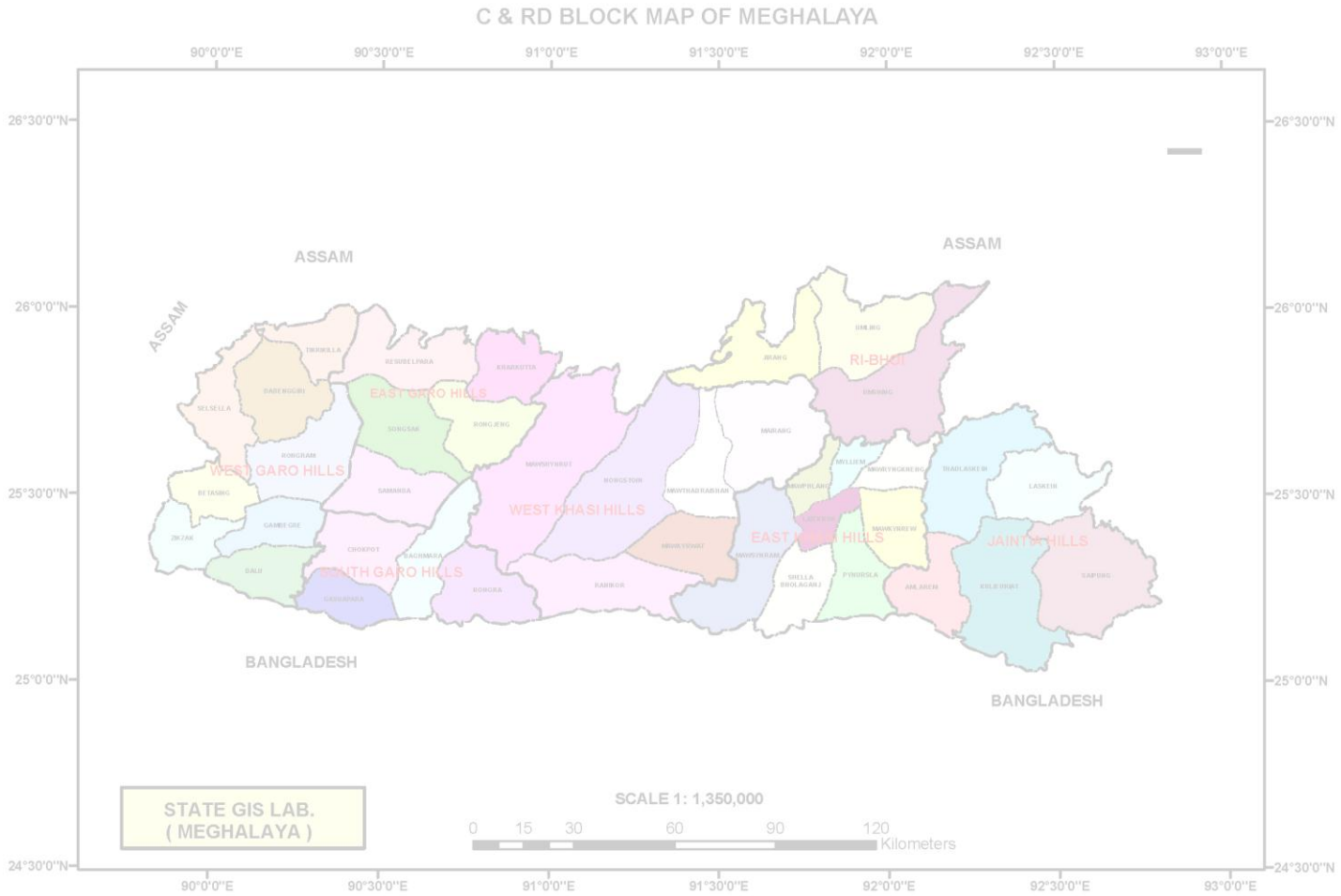
Main Crop/ Animal /Fisheries	Stage	Pest/Diseases	Agricultural Advisories
Sali/ Kharif Rice	Tillering to panicle initiation stage		• Repair bunds and keep free from weeds • Maintained a water level of 3-5 cm in the field and drain out excess water due to rains. • 1st top dressing of urea (44Kg/ha) should be done at tillering stage after 1st hand weeding or using cono-weeder.
Direct seeded Ahu	Tillering/Panicle initiation stage		• Do top dressing of 1/3rd urea (44Kg/ha) after 2nd hand weeding at 40-45 DAS. • Conserve water by repairing bunds.
		Blast	• Spray Mencozeb @ 2g/litre or Carbendezime @1g/l if blast spots are seen after the current spells of rain.
		Thrips	• Farmers should keep vigilance against the attack of thrips and spray insecticide like Chloropyriphos @ 2ml/lit of water if moderate to high intensity is observed.
		Rice Gundhi bug/Stem borer	• Spray Malathion 5% dust @ 6.25kg/ha for Rice Gandhi bug and Chloropyriphos @0.02% or Monocrotophos @ 0.04% for stem borer.
Jhum Rice	Tillering to panicle initiation stage		• Bhalum 1, 2, 3; IRAT 109, IR 50 rice are in panicle initiation stage. • Keep the fields free from weeds.
Groundnut	Pod formation and development stage	Late leaf spot Rust Groundnut leaf miner/ Leaf folder	• Weather is congenial for development of late leaf spot. Spray carbendazim (0.05%) + mancozeb (0.2%) at 2- 3 weeks intervals. • Foliar application of aqueous neem leaf extract (2-5%) or mancozeb @ 0.3% should be done if chlorotic spots are seen on the upper part and orange colored pustules on the lower part of the leaf. • Foliar sprays with acephate 1 g/l or chlorpyriphos 2.5 ml/l or monocrotophos 1.6 ml/L.
Ginger/ Turmeric	Rhizome initiation stage		• Give one hand weeding followed by fertilizer application, earthing up and mulching. • Apply 81.4 kg/ha urea and 41.75 kg/ha MOP for ginger; For turmeric apply 65.1 kg/ha urea and 100.2 kg/ha

			MOP at 90 DAS. • Mulching can be done with locally available weed biomass, maize stalk, etc. • Avoid water logging as it causes rhizome rot and fungal disease development.
		Leaf Spot Rhizome rot (ginger)	• To prevent Leaf Spot disease, apply Bordeaux mixture (5:5:50) after 4 – 5weeks of sowing or Captan @ 1.5 g/l of water. • Spray/ drench 1% Bordeaux mixture or Dithane M-45 (2.5g/l) to prevent rhizome rot.
Potato	Land preparation		• Undertake land preparation for sowing of potato. • Apply 100q/ha FYM in furrows before planting. • Collect tuber seeds of HYVs like Kufri Joyti, Kufri Megha, Kufri Giriraj, Kufri Girdhari, Kufri Himsona, Kufri Himalini and keep ready for sowing.
Nursery Bed Preparation for vegetables (Cabbage, Cauliflower, Broccoli) ➢ Prepare raised nursery bed of height of 15 cm, 1m width and length of convenient length. ➢ Drench the nursery bed with Dithane M-45 @ 3g/m2 to prevent the incidence of damping off. ➢ Apply FYM @ 4-6 kg/m2 and mix well with the soil and leveled the bed. ➢ Make rows of 5 cm distance along the width of the bed with the help of bamboo stick. ➢ Sow the seeds at 1-2 cm deep in the line and covered with sieved FYM, sand and soil mixture. ➢ Covered the bed with dry grass/paddy straw or polythene to induce early germination & removed the coverage as soon as sprouts come out. ➢ Irrigate should be given daily. ➢ Transplant the seedlings 3-6 weeks old at proper spacing. ➢ Proper channels for draining excess water to avoid water logging.			
Cauliflower	Nursery preparation to transplanting		• Recommended variety: **Meghalaya Local** • Seed rate of 400-500g is required for transplanting of 1 ha. Transplant 3- 5 weeks old seedlings at a spacing of 60 cm row to row & 45cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) at the time of transplanting
Cabbage	Nursery preparation to transplanting		• Recommended variety: **H-139, Pride of India** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45 cm row to row & 30cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) & at the time of transplanting.
Broccoli	Nursery preparation to transplanting		• Recommended variety: **Puspa, Aiswarya** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45cm row to row & 30cm plant to plant. • Apply half dose of N (30 kg/ha urea), full dose of P (500 kg/ha SSP) and K (100 kg/ha MOP) at the time of transplanting.
Carrot	Sowing		• Recommended variety: **New Karoda, Nantesh** • Seed rate of 8-10g is required for transplanting of 1 ha. • Seeds should be soaked overnight before sowing. • Seeds can be sown either by broadcasting or in rows. Rows should be made at distance of 25cm apart and sow the seeds in the rows & later do thinning maintaining plant to plant distance of 5 cm.

			• Keep the soil moist by frequent light irrigation for proper growth of roots. • Apply half N (108.5 kg/ha urea) and full P (375 kg/ha SSP) and K (100.2 kg/ha MOP) as basal dose at the time of final land preparation.
Radish	Sowing		• Recommended variety: **Local genotype** • Seed rate of 8-10g is required for transplanting of 1 ha. • Prepare ridges of 20 cm at 30-45 cm distance & sow the seeds on ridges. • Thinning should be done maintaining plant to plant distance of 7-10 cm in a row soon after they are established. • Apply half dose of N (108.5 kg/ha urea), full dose of P (375 kg/ha SSP) & K (100kg/ha MOP) as basal. • Give irrigate immediately after sowing.
Laipatta	Nursery preparation		• Recommended variety: **Local** • Seed rate of 400-500g is required for transplanting of 1 ha.
French Bean	Sowing		• After harvesting the maize crop, take up French bean and utilize the stalk of maize for climbing. • Recommended variety: **Naga Local** • Seed rate of 20-25kg is required for 1 ha. • Maintained a spacing of 45 cm row to row & 15-20 cm plant to plant. • Fertilizer dose N: P: K - 60:60:40 kg/ha. Apply half dose of N (65kg/ha urea), full dose of P (375kg/ha SSP) & K (66.8kg/ha) at the time of sowing.
Bottle gourd & Ash gourd	Fruiting to harvesting	Powdery Mildew Fruit fly	• Spray **Bavistin** 0.1% or **Karathane** wp 0.05%. • Spray Malathion @ 2 ml/L of water for control of fruit fly. (Spraying should not be done in rainy days)
Chilli	Flowering/ Fruiting	Thrips Mites	• If the leave develop crinkles and curl upwards, then apply **Carbofuran 3% G** @ 33 kg /ha or **Phorate 10 % G** @ 10 kg/ha or spray **Imidacloprid** 17.8 % SL @ 3.0 ml/ 10litre of water. • Spray Ethion @ 1.5ml or Rogor @ 2ml/L of water.
Khasi Mandarin	For bearing trees		• Apply fertilizer @ 350g Urea, 450g SSP & 200g MOP per tree. • Do mulching of basin with farm grasses.
		Trunk Borer	• Clean the bored holes of the infested trunk with iron wire and insert a cotton swab soaked in petrol or 5 ml of Dichlorvos 0.2% (2ml/l) and plug with mud
Animal Sciences			
Poultry	All stages		• Deworming of poultry should be done regularly with single dose of **Fenbendazole** @ 5mg/kg body wt. in feed. • Broiler should be provided with Vitamin B complex @ 7ml per litre in drinking water daily. • Litter should be changed periodically to avoid dampness and prevent disease development like coccidiosis. • As a preventive measure against coccidiosis, provide coccidiostatic like **Amprolium** @ 25-65 mg/kg feed once a day. • During day time sufficient ventilation should be provided to reduce the relative humidity inside the shed.

Piggery	All stages		• Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. • In epidemic areas, vaccinate 6 months old pigs with FMD vaccine once in a year.

Suggestion: Contact nearby State Agril. Staff or KVK staff for necessary help and suggestion.



GRAMIN KRISHI MAUSAM SEWA

ICAR Research Complex for NEH Region
Umroi Road, Umiam – 793 103 Meghalaya

☎: Telephone No. : 0364 2570276 (O) Fax: 0364 2570213/Email: iaasbarapani@yahoo.in

RC (AE)/30/2011/ Bulletin/September'2014/48 Dated: 12/09/2014

Agro Advisory Bulletin – East Khasi Hills
(Period 13th – 17th Sept, 2014)

Weather summery of the past three days (9th to 11th Sept, 2014)	Weather forecast valid up to 17th Sept, 2014
Sky was mainly clear to generally cloudy with moderate rainfall of **16.3mm**. Maximum temperatures ranged between 27-28.3°C and minimum ranged between 17.5-18.8°C. Mean relative humidity was 85-86% in morning and 77-80% in evening. Wind speed ranged between 1.3-1.6 kmph.	There is possibility of moderate rain in the next five days. Sky may be mainly clear to generally cloudy with a maximum and minimum temperature of 23-24°C & 16°C respectively. The expected relative humidity will be 94-96% (maximum) & 53-62% (minimum). Wind direction will be 114-181Degree at a speed of 2-4 kmph during the next five days.
	Weekly cumulative rainfall :181.0mm

Agro meteorological Advisories for coming 5 days

Main Crop/ Animal /Fisheries	Stage	Pest/Diseases	Agricultural Advisories
Sali/ Kharif Rice	Tillering to panicle initiation stage		• Repair bunds and keep free from weeds • Maintained a water level of 3-5 cm in the field and drain out excess water due to rains. • 1st top dressing of urea (44Kg/ha) should be done at tillering stage after 1st hand weeding or using cono-weeder.
Direct seeded Ahu	Tillering/Panicle initiation stage		• Do top dressing of 1/3rd urea (44Kg/ha) after 2nd hand weeding at 40-45 DAS. • Conserve water by repairing bunds.
		Blast	• Due to cloudy & high humidity, there is chance of incidence of blast. Spray Mencozeb @ 2g/litre or Carbendezime @1g/l if blast spots are seen after the current spells of rain.
		Thrips	• Farmers should keep vigilance against the attack of thrips and spray insecticide like Chloropyriphos @ 2ml/lit of water if moderate to high intensity is observed.
		Rice Gundhi bug/Stem borer	• Spray Malathion 5% dust @ 6.25kg/ha for Rice Gandhi bug and Chloropyriphos @0.02% or Monocrotophos @ 0.04% for stem borer.
Jhum Rice	Tillering to panicle initiation stage		• Bhalum 1, 2, 3; IRAT 109, IR 50 rice are in panicle initiation stage. • Keep the fields free from weeds.
Potato	Land preparation to planting		• Start preparing the field for potato. • Apply 100q/ha FYM in furrows before planting • Plant tuber seeds of HYVs like Kufri Joyti, Kufri Megha, Kufri Giriraj, Kufri Girdhari, Kufri Himsona, Kufri Himalini. • Use sprouted seed tubers of size 40-50g. • Make furrows of 50cm distance between the rows and plant the sprouted seeds in the furrows maintaining a distance of 20-25cm between plant to plant. • Apply N: P: K- 75:120:60 kg/ha at the time of sowing.
Pea	Land preparation to sowing		• Sowing of pea can be started now in high altitude of East Khasi Hills.

			• Grow varieties like Arkel (for vegetables), TRC P8, TRC P9, Prakash, Rachna. • Seed rate of 60 kg is required for 1 ha and maintain a spacing of 20-25 cm between rows & 3-5 cm plant to plant. • Recommended dose of fertilizer, NPK - 20:60:40 kg/ha (44kg Urea, 375 kg SSP & 67 kg MOP). Apply all doses of fertilizers at the time of sowing.
Nursery Bed Preparation for vegetables (Cabbage, Cauliflower, Broccoli) ➢ Prepare raised nursery bed of height of 15 cm, 1m width and length of convenient length. ➢ Drench the nursery bed with Dithane M-45 @ 3g/m2 to prevent the incidence of damping off. ➢ Apply FYM @ 4-6 kg/m2 and mix well with the soil and leveled the bed. ➢ Make rows of 5 cm distance along the width of the bed with the help of bamboo stick. ➢ Sow the seeds at 1-2 cm deep in the line and covered with sieved FYM, sand and soil mixture. ➢ Covered the bed with dry grass/paddy straw or polythene to induce early germination & removed the coverage as soon as sprouts come out. ➢ Irrigate should be given daily. ➢ Transplant the seedlings 3-6 weeks old at proper spacing. ➢ Proper channels for draining excess water to avoid water logging.			
Cauliflower	Nursery preparation to transplanting		• Recommended variety: **Meghalaya Local** • Seed rate of 400-500g is required for transplanting of 1 ha. Transplant 3- 5 weeks old seedlings at a spacing of 60 cm row to row & 45cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) at the time of transplanting
Cabbage	Nursery preparation to transplanting		• Recommended variety: **H-139, Pride of India** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45 cm row to row & 30cm plant to plant. • Apply half dose of N (130.2 kg/ha urea) & K (50 kg/ha MOP) & full dose of P (500 kg/ha SSP) & at the time of transplanting.
Broccoli	Nursery preparation to transplanting		• Recommended variety: **Puspa, Aiswarya** • Seed rate of 400-500g is required for transplanting of 1 ha. • Transplant 3- 5 weeks old seedlings at a spacing of 45cm row to row & 30cm plant to plant. • Apply half dose of N (30 kg/ha urea), full dose of P (500 kg/ha SSP) and K (100 kg/ha MOP) at the time of transplanting.
Carrot	Sowing		• Recommended variety: **New Karoda, Nantesh** • Seed rate of 8-10g is required for transplanting of 1 ha. • Seeds should be soaked overnight before sowing. • Seeds can be sown either by broadcasting or in rows. Rows should be made at distance of 25cm apart and sow the seeds in the rows & later do thinning maintaining plant to plant distance of 5 cm. • Keep the soil moist by frequent light irrigation for proper growth of roots. • Apply half N (108.5 kg/ha urea) and full P (375 kg/ha SSP) and K (100.2 kg/ha MOP) as basal dose at the time of final land preparation.
Radish	Sowing		• Recommended variety: **Local genotype** • Seed rate of 8-10g is required for transplanting of 1 ha. • Prepare ridges of 20 cm at 30-45 cm distance & sow the seeds on ridges.

			• Thinning should be done maintaining plant to plant distance of 7-10 cm in a row soon after they are established. • Apply half dose of N (108.5 kg/ha urea), full dose of P (375 kg/ha SSP) & K (100kg/ha MOP) as basal. • Give irrigate immediately after sowing.
Laipatta	Nursery preparation		• Recommended variety: **Local** • Seed rate of 400-500g is required for transplanting of 1 ha.
French Bean	Sowing		• After harvesting the maize crop, take up French bean and utilize the stalk of maize for climbing. • Recommended variety: **Naga Local** • Seed rate of 20-25kg is required for 1 ha. • Maintained a spacing of 45 cm row to row & 15-20 cm plant to plant. • Fertilizer dose N: P: K - 60:60:40 kg/ha. Apply half dose of N (65kg/ha urea), full dose of P (375kg/ha SSP) & K (66.8kg/ha) at the time of sowing.
Bottle gourd & Ash gourd	Fruiting to harvesting	Powdery Mildew Fruit fly	• Spray **Bavistin** 0.1% or **Karathane** wp 0.05%. • Spray Malathion @ 2 ml/L of water for control of fruit fly. (Spraying should not be done in rainy days)
Chilli	Flowering/ Fruiting	Thrips Mites	• If the leave develop crinkles and curl upwards, then apply **Carbofuran 3% G** @ 33 kg /ha or **Phorate 10 % G** @ 10 kg/ha or spray **Imidacloprid** 17.8 % SL @ 3.0 ml/ 10litre of water. • Spray Ethion @ 1.5ml or Rogor @ 2ml/L of water.
Khasi Mandarin	For bearing trees		• Apply fertilizer @ 350g Urea, 450g SSP & 200g MOP per tree. • Do mulching of basin with farm grasses.
		Trunk Borer	• Clean the bored holes of the infested trunk with iron wire and insert a cotton swab soaked in petrol or 5 ml of Dichlorvos 0.2% (2ml/l) and plug with mud.
Animal Sciences			
Poultry	All stages		• Deworming of poultry should be done regularly with single dose of **Fenbendazole** @ 5mg/kg body wt. in feed. • Broiler should be provided with Vitamin B complex @ 7ml per litre in drinking water daily. • Litter should be changed periodically to avoid dampness and prevent disease development like coccidiosis. • As a preventive measure against coccidiosis, provide coccidiostatic like **Amprolium** @ 25-65 mg/kg feed once a day. • During day time sufficient ventilation should be provided to reduce the relative humidity inside the shed.
Piggery	All stages		• Vaccinate all newly born piglets against swine fever at the age of 3 months followed by annual booster dose. • In epidemic areas, vaccinate 6 months old pigs with FMD vaccine once in a year.

Suggestion: Contact nearby State Agril. Staff or KVK staff for necessary help and suggestion.