FARM OPERATIONS FOR AUGUST

PADDY

1. To the rice crop, irrigation should be given two days after the ponded water has infiltrated into the soil but fields should not be allowed to develop cracks. Last dose of nitrogen (30 kg urea/acre) may be applied if already not given. If urea is to be applied with the help of leaf colour chart, apply 25 kg urea/acre only if 6 leaves out of 10 are lighter than shade no 4 of leaf colour chart. In direct seeded rice (DSR) apply second and third dosage of about 43 kg urea/acre each at 6 and 9 weeks of sowing.

2. In highly deteriorated soils, zinc deficiency may appear in patches even after the application of recommended dose of zinc sulphate. In such cases apply an additional dose of 10 kg zinc sulphate (21%) or 6.5 kg zinc sulphate (33%) per acre mixed with equal amount of dry soil, on the affected area.

3. Iron deficiency may appear in sandy soils. The deficient plants show yellowing on younger leaves which ultimately turn white. To correct this malady, 1.0 % ferrous sulphate solution (one kg ferrous sulphate in 100 litres of water per acre) may be sprayed 2-3 times at weekly intervals. Do not apply ferrous sulphate to soil.

4. In early transplanted crop, drying of leaves due to bacterial leaf blight disease may be noticed. Spray with any chemical will not be helpful to control this disease. Do not pond water in the field. Addition of nitrogen will further increase the disease.

5. Sheath blight may be noticed during the month of August. The disease can be checked by spraying Amistar Top 325 SC @ 200 ml or Nativo 75 WG @ 80 g or Lustre 37.5 SE @ 320 ml or Folicur/Orius 25 EC @ 200 ml or Bavistin 50 WP @ 200 g or Tilt/Bumper 25 EC or Monceren 250 SC 200 ml in 200 litres of water. Keep the bunds clean by removing weeds.

6. To check false smut spray the crop with Kocide 46 DF @ 500 g in 200 litres of water per acre at boot stage in disease prone areas.

7. **Rice Stem Borers:** The larvae bore into the stems of young plants and dead hearts. When these attack the old plants of paddy, then empty and erect white ear-heads are produced. The fields showing more than 5 per cent dead hearts (ETL) should be sprayed with 20 ml Fame 480 SC (flubendiamide) or 170 g Mortar 75 SG (cartap hydrochloride) or one litre of Coroban/Dursban/Lethal/Chlorguard/Durmet/Classic/Force 20 EC (chlorpyriphos) in 100 litres of water per acre. These insecticides may be repeated as and when damage reaches economic threshold level. In basmati rice, when there are more than 2% dead hearts, apply Fame 480 SC @ 20 ml or Mortar 75 SG @ 170g or Coragen 18.5 SC (chlorantraniliprole) @ 60 ml or one litre of Coroban/Dursban/Lethal/Chlorguard/Durmet/Classic/Force 20 EC in 100 litre of water per acre. In addition to these insecticides, Ferterra 0.4 GR (chlorantraniliprole) @ 4 kg or Padan/ Caltan/Kritap/Sanvex/Nidan/Marktap/Miftap/Katsu 4G (cartap hydrochloride) @ 10 kg/acre or Vibrant 4 GR (thiocyclam hydrogen oxalate) @ 4 kg or Regent/ Mortel/Mipro-G/Mahaveer GR/Shinzen 0.3 G (fipronil) @ 6 kg or Dursban 10 G (chlorpyriphos) @ 4 kg per acre can also be used in standing water in basmati rice. These insecticides also control leaf folder in addition to stem borers.

8. **Leaf Folder:** The larvae of this insect fold the leaves, eat out the green tissues and produce white streaks. Control this pest when the leaf damage reaches 10 per cent (ETL) by spraying 20 ml Fame 480 SC or 170 g Mortar 75 SG or one litre of
Coroban/Durmet/Force 20 EC in 100 litres of water per acre. Application of Ferterra 0.4 GR @ 4 kg or Padan/Caldan/ Kritap/ Sanvex/ Nidan/Marktap/Miftap/Katsu 4G @ 10 kg or Regent/Mortal/Mifpro G/ Mahavir GR/Shinzen 0.3 G @ 6 kg or Dursban 10 G @ 4 kg/acre recommended for control of stem borer in basmati rice also control leaf folder.

9. **Plant hoppers:** These insects can be controlled by spraying the crop with 120 g Chess 50 WG (pymetrozine) or 40 ml Confidor 200 SL or Crocodile 17.8 SL (imidacloprid) or 800 ml of Ekalux/Quinguard/Quinalmass 25 EC (quinalphos) in 100 litres of water per acre. For better results use knapsack sprayer while directing its spray towards the base of the plants.

**MAIZE**

1. Maize hybrid (PMH 1or PMH 2) can be sown during the second fortnight of this month in rows 60 cm apart and plant to plant distance of 20 cm. The sowing can be done on flat bed or side of the ridge depending upon the prevailing weather conditions. The agronomic practices and fertilizers are same as recommended for kharif crop.

2. Adequate supply of water is essential for proper growth of crop. However, maize is very sensitive to standing water, so excess water may be drained out from the field which would also help to keep stalk rot under control. Damage due to standing water can be minimized by two sprays of 3 per cent urea solution at weekly interval or by applying additional nitrogen @ 12-24 kg (25-50 kg urea) per acre in case of moderate to severe damage after the flooding is over.

3. Apply last dose of nitrogen i.e. 37 kg urea per acre to early sown hybrids or high yielding varieties of maize at the appearance of tassels. Apply 25 kg urea per acre to local maize/Pearl Popcorn/ Kesri.

4. To control leaf blight, spray the crop with Indofil M 45 @ 200 g in 100 litres of water.

5. The attack of maize borer can be checked with 30 ml of Corgen 18.5 SC (chlorantraniliprole) in 60 litres of water per acre. Bioagent *Trichogramma chilonis* can also be used to controls this pest.

**COTTON**

1. To keep weeds under check, give hoeing. Apply 33 kg urea/acre to varieties, 45 kg to Bt cotton and 40kg urea/acre to PAU Bt 1on the appearance of first flower. Use PAU LCC for need based urea application. Apply 4 sprays of 2% potassium nitrate (13:0:45) solution at weekly intervals, starting at flower initiation.

2. Spray against whitefly should be done when population reaches 6 adults per leaf in the upper canopy of plants before 10 AM with Polo/ Craze/ Ruby/ Ludo/ Shoku 50 WP (diafenthiuron) @ 200 g/acre or Ulala 50 WG (flonicamid) @ 80 g/acre or Osheen 20 SG (dinotefuran) @ 60 g/acre Applaud 2.5 SC (buprofezin ) @ 400ml or Dantotsu 50 WG (clothianidin) @ 20g or Lano 10 EC (pyriproxyfen) @ 500ml or Oberon/voltage 22.9 SC (spiromesifen) @ 200ml/acre or Fosmite/Volthion/Goldmit 50 EC (ethion) @ 800 ml/acre Nimbicidine/Achook (neem based) @ 1 litre. Initiate spray against jassid when ever some of the fully formed leaves in the upper canopy show yellowing and curling at the margins on 50 percent on the plants. Use Ulala 50 WG (flonicamid) @ 80 g/acre or Osheen 20 SG (dinotefuran) or Imidacel/Markdor/Isogashi 17.8 SL/Confidence 555/Confidor 200 SL (imidacloprid) @ 40 ml/acre or Actara/Extra Super/ Dotara/ Thomson 25 WG (thiamethoxam) @ 40 g/acre in 125-150 litres of water.
3. Attack of mealybug can be checked by spraying 500 ml Applaud/Tribune 25 EC (buprofezin) using 125-150 litres of water per acre.

4. To protect the crop from bollworm and tobacco caterpillar damage, the insecticides given for the control of bollworm and tobacco caterpillar in Table 1 are recommended. These should be sprayed using 125-150 litres of spray material per acre with manually operated knapsack sprayer or 75 litres with the shoulder mounted power sprayer and tractor mounted sprayer when the damage in shed fruiting bodies exceed 5% and thereafter spray as and when need arises.

Insecticides for the control of bollworms in cotton

<table>
<thead>
<tr>
<th>Brands (insecticides)</th>
<th>Dose/acre</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pink bollworm</strong></td>
<td></td>
</tr>
<tr>
<td><strong>A. Synthetic Pyrethroids</strong></td>
<td></td>
</tr>
<tr>
<td>Fastac/Alphagaurd/Merit Alpha 10 EC (alphamethrin)</td>
<td>100 ml</td>
</tr>
<tr>
<td>Bulldock 0.25 SC (β-cyfluthrin)</td>
<td>300 ml</td>
</tr>
<tr>
<td>Ripcord/Bileyp/Bullet/Ustad/Cypergaurd 10 EC (cypermethrin)</td>
<td>200 ml</td>
</tr>
<tr>
<td>Cymbush/Cyperkill/Hilleyper/Colt/Basathrin/Agrocyper/Cypergaurd 25 EC (Cypermethrin)</td>
<td>80 ml</td>
</tr>
<tr>
<td>Decis/Rukrain/Decicare 2.8 EC (deltamethrin)</td>
<td>160 ml</td>
</tr>
<tr>
<td>Sumicidin/Fenval/Agrofen/Fenlik/Triumph card/ SB Fenvalerate Milfen/ Markfenval 20 EC (fenvalerate)</td>
<td>100 ml</td>
</tr>
<tr>
<td>Meothrin 10 EC (fenpropathrin)</td>
<td>300 ml</td>
</tr>
<tr>
<td><strong>Pink, Spotted and younger larvae of American bollworm</strong></td>
<td></td>
</tr>
<tr>
<td><strong>A. Carabamates</strong></td>
<td></td>
</tr>
<tr>
<td>Larvin 75 WP (thiodicarb)</td>
<td>250g</td>
</tr>
<tr>
<td><strong>B. Organophosphatic</strong></td>
<td></td>
</tr>
<tr>
<td>Curacron/Carina/Profex/Celcron 50 EC (profenophos)</td>
<td>500 ml</td>
</tr>
<tr>
<td>Fosmite/E-mite/Volthion 50 EC (ethion)</td>
<td>800 ml</td>
</tr>
<tr>
<td><strong>C. Miscellaneous group</strong></td>
<td></td>
</tr>
<tr>
<td>Fame 480 SC (flubendiamide)</td>
<td>40 ml</td>
</tr>
<tr>
<td><strong>Grown up larvae of American bollworm</strong></td>
<td></td>
</tr>
<tr>
<td>A. Naturalyte</td>
<td></td>
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<tr>
<td>------------------------------</td>
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<tr>
<td>Tracer 48 SC (spinosad)</td>
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<table>
<thead>
<tr>
<th>B. Oxadiazine</th>
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<tbody>
<tr>
<td>Avaunt 15 SC/Avaunt 15 EC (indoxacarb)</td>
<td></td>
<td>200 ml</td>
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<table>
<thead>
<tr>
<th>C. Miscellaneous group</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Sumipleo 10 EC (pyridalyl)</td>
<td></td>
<td>300 ml</td>
</tr>
<tr>
<td>Coragen 18.5 SC (chlorantraniliprole)</td>
<td></td>
<td>60 ml</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>D. Organophosphates</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Coroban/Dursban/Durmet/Chlorgaurd/Lethal/Force/Markpyrophos 20 EC (chlorpyriphos)</td>
<td></td>
<td>2 litres</td>
</tr>
<tr>
<td>Orthene/Asataf/Starthene/Markpate 75 SP (acephate)</td>
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<td>60 ml</td>
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<thead>
<tr>
<th>Tobacco caterpillar</th>
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<table>
<thead>
<tr>
<th>A. Insect Growth Regulator</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Rimon 10 EC* (novaluron)</td>
<td></td>
<td>150 ml</td>
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</table>

<table>
<thead>
<tr>
<th>C. Miscellaneous group</th>
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</thead>
<tbody>
<tr>
<td>Coragen 18.5 SC (chlorantraniliprole)</td>
<td></td>
<td>60 ml</td>
</tr>
</tbody>
</table>

**Note:**

a. Regularly monitor the pest population.
b. For effective insecticide resistance management, do not repeat the insecticide of same group in subsequent sprays.
c. Do not use mixture of insecticides as these will result in faster development of resistance and resurgence of pests.
d. Do not use synthetic pyrethroids on cotton for the control of bollworm complex after mid September.
e. Repeat the spray immediately if it rains within 24 hours after spray.
f. If hairy caterpillars damaged cotton crop during June-July, use 500 ml Quinalphos 25 EC in 100 litres of water per acre.
g. Cotton is highly sensitive to the 2, 4-D weedicide. Some farmers spray the ester form of 2, 4-D for controlling weeds in maize grown near the cotton fields. Owing to the volatile nature of 2,4-D ester, its vapours cause serious injury to the cotton crop. Hence avoid the application of this herbicide in maize, if cotton is grown in the adjoining fields. The other precautions are:
a. After using 2,4-D fill all spraying equipments as well as tubs, buckets, etc. with 0.5 per cent washing soda solution (500 g of washing soda in 100 litres of water) in the evening. Next morning, flush all equipments thoroughly with fresh water.
b. To avoid the use of contaminated insecticides on cotton, it is advisable to test insecticide at least two weeks in advance on a few plants. If the insecticide is contaminated with 2, 4-D, the tender leaves and shoots could become distorted and lanceolated within 10 days. Reject such an insecticide.
c. To control fungal foliar leaf spots, the crop should be sprayed with Amistar Top or 200 ml/acre in 200 liters of water at 15-20 days interval.

SUGARCANE
1. To prevent lodging, prop up the crop at the end of this month by using trash twist method.
2. Iron deficiency is observed both in the ratoon and plant crop on light textured and calcareous soils. Deficiency symptoms first appear on young leaves as yellow stripes between the green veins, later the veins also turn yellow. In severe cases, leaves become white and the plants remain stunted. To correct this deficiency, 1 % ferrous sulphate solution (one kg ferrous sulphate in 100 litres of water per acre) may be sprayed 2-3 times at weekly intervals soon after the symptoms appear.
3. Release bio-agent, *Trichogramma chilonis* @ 20,000 per acre from July to October (10-12 releases) at 10 days interval for the management of stalk borer in sugarcane.
4. Collect and destroy the infected shoots affected with different borers particularly that of Gurdaspur borer at weekly interval regularly to prevent further infestation of the healthy canes.
5. For the management of Sugarcane Pyrilla, use chlorpyriphos 20 EC @ 600 ml/acre in 400 litre of water.

FODDER PRODUCTION
1. Sow leguminous and non-leguminous crops in mixture to improve the nutritive value of the fodder i.e. maize + cowpea, sorghum + guara.
2. Apply 30 kg N (66 kg urea)/ acre to the multicut fodder (napier bajra hybrid and Guineagrass) after every cutting.
3. For controlling *itsit/chaupatti* in maize, sorghum, bajra, spray Atrataf 50 WP (atrazine) pre-emergence @ 800 g, 400 g and 200 g per acre, respectively, before 15th August. Late application will have residual toxicity effect on the succeeding crops like wheat, berseem etc.
4. Harvest the fodder crops at optimum stage like maize at milk ripe stage, bajra at flagleaf stage, napier bajra or guinea grass at one metre height and sorghum at pre-flowering to flowering stage to obtain maximum nutrients for the milk production.
5. Conserve surplus fodders like maize, sorghum, napier bajra, guinea grass as silage to be used in lean periods for cheap milk production.

GENERAL PESTS AND WEEDS
1. The weeds in non-cropped areas like on farm, roods, water channels etc. can be controlled by spray of gramoxone 24SH (Paraquat dichloride) @ 250 to 500 ml in 100 litres of water. Alternatively spray roundup/genki SH (glyphosate) @ 700 ml or Excel Mera 71 SG (glyphosate) @ 400g in 100 litres of water.
*Parthenium (Congress grass/Carrot grass)*

It is a problem weed of waste places, orchards and plantation crops. It makes luxuriant growth during this period. Check this weed through mechanical means such as repeated cuttings and digging. Spraying of Atrataf 50 WP @ 1.0 kg/acre can be used as pre-emergence or post-emergence for control of congress grass. For control of large plants of 3-4 leaf stage and above, apple 0.7 to 1 litre of Roondup 41SH (gl) phosate) or 400g of Excel Mera 71 SG (glyphosate) in 100 litres of water.
VEGETABLES

Cauliflower

Sow 250 g seed of mid season varieties in one marla bed area. Irrigate the nursery beds with a watering can daily in the beginning and thrice a week thereafter. Treat the seed with 3 g Captan or Thiram per kg of seed before sowing.

Root crops

From the last week of this month, start sowing Asiatic (Desi) varieties of radish (Pusa Chetki), carrot (Punjab Black Beauty, Punjab Carrot Red and PC-34) and turnip (L-1). Before sowing, add 15 tonnes FYM, 55 kg urea and 75 kg single superphosphate per acre. Apply 50 kg muriate of potash per acre to carrot only. Prepare ridges 45 cm apart and dibble seed in fully moist conditions at 7.5 cm spacing. Apply light irrigation immediately after sowing. Use 4-5 kg seed of radish and carrot and 2-3 kg seed of turnip to sow an acre.

Chilli

1. Harvest red ripe fruits once a fortnight to minimize shedding in the fields. Fully developed green fruits may be plucked for use as a salad and pickle.
2. For control of fruit rot and die back, spray the crop with 250 ml of Folicur or 750 g of Indofil M 45 or Blitox in 250 litres of water per acre at 10 days interval.

Brinjal and Okra

Spray 80ml Coragen 18.5 SC (chlorantraniliprole) or 80g Proclaim 5 SG (emamectin benzoate) or 100 ml Sumicidin 20 EC or 200 ml Ripcord 10 EC in 100-125 litres of water against fruit and shoot borer of brinjal.

1. In brinjal, spider mite attack can be minimized by spraying 300 ml O-mite 57 EC per acre in 150 litres of water.
2. The attack of jassid on bhindi can be reduced by spraying 40ml confidor 17.8 SL (imidacloprid) or 40g Actara 25 WG (thiamethoxan). As soon as flowering starts give 3 sprays at fortnightly intervals with 70 g Proclaim 0.5 SG or 100 ml of Sumicidin 20 EC or 80 ml of Cymbush 25 EC in 100-125 litres of water per acre to control jassid as well as spotted bollworms.

Onion

During this month start planting kharif onion crop both with bulbsets as well as seedlings. Apply 45 kg urea, 125 kg single superphosphate and 35 kg muriate of potash per acre before planting. Transplant seedlings at 15 × 7.5 cm distance and irrigate the field immediately after transplanting.
HORTICULTURAL OPERATIONS

1. Weather in this month is very suitable for planting of evergreen fruit plants like citrus, mango, guava, litchi, loquat, sapota etc.
2. The excess rain water when stagnates for several days is harmful to the orchard trees. Adopt prompt measures to drain out excess rain water from the orchard. Root damage due to water stagnation in pear, peach can be managed with immediate draining of excess water from the root zone followed by hoeing at optimum moisture (wattar) conditions. Prune the dried ends of the branches along with 5-8 cm of the live wood.
3. Spray the affected citrus trees with 0.47% (4.7 g/litre of water) zinc sulphate without addition of lime to late summer flush to control zinc deficiency. To correct zinc and manganese deficiency, spray the plant with zinc sulphate (470 g) + manganese sulphate (330 g) in 100 litres of water. A gap of one week should be kept between the foliar application of Bordeaux mixture and zinc sulphate and manganese sulphate solution.
4. The physiological fruit drop in citrus can be checked by spraying 2,4-D sodium salt of Horticultural grade (5 g) in 500 litres of water/acre in mid August.
5. Spray Bordeaux mixture (2:2:250) for the control of citrus diseases. To control foot rot of citrus, drench the soil and main limbs of the affected plants with sodium hypochlorite (5%) @ 50 ml in 10 litres of water per tree under their canopies.
6. To check weeds in the orchard, cultivate the soil during this month, otherwise it will be difficult with extensive growth of plants afterward.
7. To control Anthracnose and downy mildew diseases of grapes, spray the vines with Bordeaux mixture (2:2:250) in end August using 500 litres of water/acre.
8. Fix PAU fruit fly traps @ 16/acre in citrus orchards in the second week of August and recharge the same if required.
ORNAMENTALS

Permanent plants
The plantation of ornamental trees, shrubs and climbers can be continued in this month. The tips of the young bougainvillea plants grown in pots should be pinched off for desired shape and size.

Pot plants
Rooted cuttings or suckers of pot plants should be planted in the pots. This is ideal time for the potting and repotting, while repotting, the roots of the plants needs to be pruned and the soil mixture is refilled in this process. Propagation of pot plants can also be done during this month.

Lawns
New Lawn can be planted in this month in already prepared. Established lawns should be frequently moved and rolled for carpet like effect.

Chrysanthemum
1. Rooted cuttings planted in pots in the last month should be trained according to their types viz. standard and spray type.
2. The small flowered ‘spray’ type varieties should be pinched by removing terminal buds when the plant height is 8-10 cm. This helps to have more number of flowers. Through pinching any shape can be given to pot grown Chrysanthemum

Roses
Regular weeding of roses should be done and suckers should be removed. Take care of attack of red scale.

Shrubs
The shrubs can be propagated from hardwood cuttings during this month. Tree seeds can also be planted during the method.
AGRO FORESTRY

Transplanting of most of the tree species (except poplar) like Safeda, Kikar, Subabul, Tahli, Dek, Nim, Sagwan etc. should be done during July-August (rainy season). The pits of 50×50×50 cm should be filled with 50 percent top soil and 50 percent farm yard manure and 10-15 g Lindane 10 % (dust) should be added. Plant the seedlings in the centre of the pit after gently removing the polythene bag. Care should be taken that the earth ball and roots may not get damaged. The plants should be watered immediately.

POPLAR

1. All the kharif crops (except paddy) can be grown in poplar during first two years of tree growth. Afterwards kharif fodders such as maize, sorghum, bajra, guinea grass etc. should be grown.

2. Poplar leaf defoliator and leaf webber: Collect the badly infected leaves having eggs and caterpillers of defoliators and leaf webber and bury in the soil. Keep the fields weed free.

SAFEDE

Safeda is commonly planted on the field boundaries. Keep the boundary in North-South row orientation to minimize the light competition of trees with agriculture crops. Separate agronomic management of crops is required 10-15 m wide strip running along the boundary plantation of Eucalyptus. Fodder crops (e.g. bajra, jowar) should be grown rather than grain crops on 10-15 m wide strip running along the boundary plantation.
BEE KEEPING

Inspect all the honey bee colonies very quickly and if there is scarcity of food reserves in the colonies and also dearth of bee flora in the fields, provide sugar syrup (sugar and water mixed in ratio of 1:1) to all the colonies in the late evening. Prefer to provide this feed in Division Board Feeder or directly into empty raised combs. For augmenting brood rearing, the colonies should be fed either stored pollen or PAU pollen substitute/supplement. Take all precautionary measures to avoid robbing and appropriate measures to check it if at all it occurs. Protect colonies from the attack of wax moths, ants, wasps and green bee-eaters. Take appropriate measures to check wax moth infestation of stored combs. Unite weak, queenless and laying worker colonies, if any, with queen-right colonies after the necessary preliminaries. Must keep the colonies on high stands and tilted a little in front to prevent the entry of rain water into the colonies or its accumulation inside the hive. Hives should not be left in low lying places and ensure their placement at upland to ensure adequate ventilation in order to minimize the impact of high humidity, besides preventing chances of accumulating rain water entering into the colonies. Remove all the weeds growing underneath and around the colonies. Ensure that aeration facilitating wire gauge of inner cover is clean and should not be clogged with propolis.
MUSHROOM

1. During the month of August paddy straw bundles are wetted and spawned for cultivation of paddy straw mushroom.
2. Watering of the spawned beds should be continued twice a day.
3. Harvest the crop in one month.
4. Remove the old beds after harvesting and new beds for paddy straw mushroom can be laid.
5. Cropping of milky mushroom should be continued during the month.
6. Procure decomposed farm yard manure for its use during white button mushroom cultivation (Oct.-March).
DAIRY FARMING

1. Separate the pregnant animals from the rest of the herd 2 weeks before the expected date of calving. Keep such animals under observation.
2. It is calving season and observe the animal daily for normal calving. In case the animal does not calve but show the symptoms then get it examined from Veterinary Doctor since it is an emergency as the life of mother and foetus is involved.
3. If the placenta is not shed within 8-12 hours after the parturition take the Veterinarian’s help.
4. Feed wheat *dalia* @ 1 kg after boiling and mixing with half kg of *gur* twice daily for first 3-4 days to the mother after calving. Supplement the feed with mineral mixture to save the animal from milk fever.
5. Immediately after birth of the calf, remove mucous from the nose and mouth. Dry the calf with a towel and feed 3-4 litres colostrum to the calf within 1-2 hours of its birth.
6. Cut the naval with the sterilized scissor and apply Povidone Iodine on the naval cord of the calf till it dries off to avoid naval ill.
7. Do not completely milk the animal to avoid milk fever.
8. If the animal has a wound, protect it from flies so that maggots do not develop into it. Keep the surroundings clean and preferably apply fly repelling ointment on the wound i.e. Himax or Lorexane or Ectosep.
9. Due to heat, humidity and rain and lack of fodder, it is a stress period for the animals. Protect the animal from inclement weather and heat and provide alternate feed like concentrate mixed with wheat straw or silage.
10. If not vaccinated get your animals vaccinated against *Haemorrhagic Septicaemia* (*Gal Ghotu*) immediately.
11. This month is hot, humid during which flies, lice and ticks are very common. These suck blood, cause skin irritation and spread diseases. To check these, spray Asuntol 0.05%, Butox 0.02% and Taktic (12.5%) 0.02 % on the animals as well as on the sheds and repeat the spray after 10-15 days. Do not spray animals below 6 months of age. Animals sheds especially corners, crevices etc. should also be sprayed. Take full care that insecticides do not get mixed with feed, fodder and drinking water. Strictly follow the manufacturer’s instructions while spraying the insecticide. Also deworm the animals with broad spectrum anthelmintics.

POULTRY FARMING

1. The ration should contain 15-20 % more protein, minerals and vitamins.
2. Damp litter and high temperature are good media for the growth of protozoa which cause *Coccidiosis* in the chicken so avoid dampness in the deep litter house by stirring the litter 2-3 times in a week.
3. Place the nests inside the sheds, 1-2 weeks prior to the start of egg production.
4. The lights may be kept on during the cooler parts of the nights viz. late evening and early morning so that the birds can compensate the feed consumption of hot period of the day.
5. Keep sufficient cold water available for the birds.
6. Be careful about the health of the birds. Immediately consult the expert in case of sickness of the birds.
7. Do not store the compound feed for more than 15 days to avoid aflatoxins.
8. Control the flies in the shed especially in cage house.
9. Debeaking and vaccination may be done up to 14-16 weeks of age the price of eggs start rising in this month so there should be minimum disturbance after laying starts.
Compiled by:  Amarjit Singh