



## Directorate of Extension



S.K. University of Agricultural Sciences and Technology of Kashmir,  
Shalimar, Srinagar -190 025

"An institution  
striving to achieve excellence in  
Mountain Agricultural Systems"

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### Monthly Workshop for Extension functionaries of Developmental Line Departments and Subject Matter Specialist of KVKs.

### Monthly Message for November

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#### Agronomy

<i>Crop</i>	<i>Operation/ Diseases/pests</i>	<i>Message/Impact points</i>
<b>Rabi Crops</b>		
Wheat	Delayed Sowing	<ul style="list-style-type: none"><li>- If any farmers have not sown timely then it should be sown as soon as possible. Delay sowing leads to poor yield and delayed maturity.</li><li>- Sowing should be done in rows keeping row to row distance of 23 cm and at a depth of 4-5cm to ensure proper germination.</li><li>- Seed rate should be increased up to 120 kg/ha.</li><li>- In timely sown crop if pre-emergence herbicide are not applied then weeds can be controlled by application of post emergence herbicide like sulfosulfuron @ 30 g a.i./ha or Isoproturon 1.5 kg a.i./ha + 2,4-D @ 0.5 kg a.i./ha at 30-35 days after sowing.</li></ul>
Brown Sarson	Thinning and hand weeding	<ul style="list-style-type: none"><li>- Partial thinning along with hand weeding should be done at 25-35 days after sowing of brown sarson.</li></ul>
<b>Rabi Pulses</b>		
Field Pea	Field preparation / Sowing	<ul style="list-style-type: none"><li>- Sowing of field pea can be done up to ending November. Delay sowing leads to yield reduction.</li><li>- Recommended varieties are Shalimar Pea-1, Rachna and Prakash, HUDP-15, VL-45, &amp;HFP-715</li><li>- For pea cultivation 2-3 ploughings accompanied by planking will be sufficient to obtain desired seed bed.</li><li>- Apply well decomposed compost or FYM uniformly @ 10-15 t/ha and should be incorporated in the soil at the time of land preparation. Application of vermicompost @ 2.5 t/ha will replace 5 t FYM/ha and 25% NPK from recommended dose of fertilizers.</li><li>- For pea, urea @ 0.75 kg/kanal, DAP @ 6.5 kg/kanal, and MOP 3.4 kg/kanal should be applied as basal dose at the time of last ploughing and then level the land by planking before seed sowing.</li><li>- Seed rate of 60 to 65 kg /ha is recommended. In case of bold seeded varieties, seed rate can be increased up to 100 kg/ha.</li><li>- Make 10% gur/jagary solution and mix <i>Rhizobium</i> spp. @ 5-10 gm /kg seed in the solution.</li><li>- Do not treat seeds with fungicides in case seeds are being inoculated.</li><li>- Line sowing with the help of seed drill or opening the furrows at 30</li></ul>

- cm apart. The seed should be placed 5 to 6 Cm deep in the soil.
- Lentil
- Pre-emergence spray of pendimethalin @ 1 kg a.i./ha at 2-3 DAS.
  - Sowing should be completed up to first fortnight of November.
  - Recommended varieties are Shalimar Masoor -1, Shalimar Masoor - 2
  - For preparation of land, minimum two ploughings are recommended. The soil should be worked with cultivator so that it is well pulverized.
  - Apply well decomposed compost or FYM uniformly @ 10-15 t/ha and should be incorporated in the soil at the time of land preparation. Application of vermicompost @ 2.5 t /ha will replace 5 t FYM/ha and 25% NPK from recommended dose of fertilizers.
  - For Lentil, urea @ 0.75 kg/kanal, DAP @ 6.5 kg/kanal, and MOP 2.5 kg/kanal should be applied as basal dose at the time of last ploughing and then level the land by planking before seed sowing.
  - Seed rate of Lentil 40 kg /ha is recommended
  - Seed should be treated with *Rhizobium*. Make 10% gur/jagary solution and mix *Rhizobium* species @ 5-10 gm /kg seed in the solution. Seed should be dipped in the solution for 10 minutes followed by drying under the shade. Do not treat seeds with fungicides in case seeds are being inoculated.
  - Seed should be sown in lines at a spacing of 25 cm apart.
  - Pre-emergence spray of pendimethalin @ 0.75 kg a.i./ha within 2-3 DAS to control the weeds effectively.
- Oat fodder      Delayed Sowing
- If any farmers have not sown timely then it should be sown as soon as possible. Delay sowing leads to poor yield.
  - Sowing of seed should be done rows.
  - Seed rate should be increases up to 120 kg/ha.

### **Entomology (Agriculture)**

No advisory suggested for the month.

### **Entomology (Horticulture)**

- |                       |   |   |
|-----------------------|---|---|
| Apple                 | <i>San Jose scale &amp; Woolly aphid</i><br><i>apple</i><br><i>Apple stem borer</i> | <ul style="list-style-type: none"> <li>- Remove twigs infested with WAA and SJS during pruning and dispose them away from the orchard. Apply Chaubatia paste on cut areas.</li> <li>- Heavily infested branches, twigs and completely dried trees should be uprooted, removed from the orchard and burnt</li> </ul> |
| Walnut<br>Pomegranate | <i>Walnut fruit grub</i><br><i>Fruit borer</i>                                      | <ul style="list-style-type: none"> <li>- Sanitation of areas under walnut cultivation</li> <li>- Collection and disposal of infested fruits, both fallen as well as on tree</li> <li>- Ploughing around the trees to expose overwintering pupae for predation/dessication.</li> </ul>                               |
- **Note: All sprays are need based.**
- |  |  |   |
|--|--|---|
| Vegetables<br>Rabi<br>vegetables<br>(Carrot, | <i>Overwintering soil insect pests</i> | <ul style="list-style-type: none"> <li>- If cabbage aphids are observed removal and destruction of infested leaves are suggested</li> <li>- For overwintering soil arthropods like army worm and white</li> </ul> |
|--|--|---|

spinach, kale & onion)		grubs apply Carbofuran 3% CG @ 32.0 Kg./ ha.
Cole crops	<i>Cabbage aphids, Cabbage butter fly, DBM etc.</i>	<ul style="list-style-type: none"> <li>- Collection and destruction of Cabbage aphids</li> <li>- Collection and destruction of larvae/ pupae of DBM infesting leaves of Kale, cabbage and cauliflower</li> <li>- In case of severe infestation spray dichlorvos 76 EC @ 0.75 ml/ lit.</li> </ul>
Rodent management	<i>Horticulture</i>	<p><b>Field sanitation :</b> Removal of left over debris and grasses from orchards to discourage rodents from availability of food and shelter</p> <p><b>Reduction in bund size:</b> Reduce the size of bunds or boundaries around the orchards up to 30cm to force the rodents to leave the burrows</p> <p><b>Burrow Fumigation :</b> Smoking the burrow with cow dung +Maize straw/maize pith + weeds with the help of burrow fumigator</p> <p><b><u>Chemical control (Rodent bait schedule):</u></b></p> <ul style="list-style-type: none"> <li>✓ <b>Day 1:</b> Plugging of burrows.</li> <li>✓ <b>Day 2:</b> Identification of live burrows for pre-baiting prior to poison baiting; For pre baiting with plain bait (crushed rice (48 gm) + broken wheat grain (48 gm)+ sugar (2.0 gm and 2.0 ml. mustard oil) and place 10-15gm/ live burrow.</li> <li>✓ <b>Day 3:</b> 2.0% Zinc Phosphide* baiting during late evening with (crushed rice (48 gm) + broken wheat grain (48 gm) + Zinc Phosphide 2.0 gm and 2.0 ml. mustard oil, all mixed together)be placed inside the live burrow @ 6-10 g bait/ live burrow) .</li> <li>✓ <b>Day 4:</b> Collection and burying of dead rodents. Close all burrows at evening hours.</li> <li>✓ <b>Day 5:</b> Identification of live burrows.</li> <li>✓ <b>Day 6:</b> Fumigate live reopened burrows with Aluminum phosphide pellets @ 2 pellets/burrow or 5-10 g pouch/burrow and cover with wet mud.</li> </ul> <p><b>Precautions :</b> Since residual rodent population develops bait shyness after one baiting with Zinc Phosphide, a minimum of 50-60 days gap should be given before it is used again.</p> <p><b>** If treatment has been carried out during November then do not repeat during November</b></p>
Apiculture	<ul style="list-style-type: none"> <li>☞ Extraction of honey from colonies and keep sufficient store in the colonies for winter</li> <li>☞ Remove super from colonies</li> <li>☞ Shift colonies from hilly areas to plains</li> <li>☞ Unite weak colonies with strong colonies</li> <li>☞ Clean hives and dust with sulphur</li> <li>☞ Give winter package to colonies</li> </ul>	

### Plant Pathology (Horticulture)

<b>Fruit</b>		
Apple/pear	<i>Foliar fungal disease</i>	- Collection and destruction of fallen leaves.
	<i>Fruit rots</i>	- The diseases fruits left in and around orchards should be buried in compost pits to avoid over-wintering of pathogens.
	Root rot	- Drench tree basin of affected tree with Carbendazim 50 WP

- @ 0.1% or Carbendazim 12% + Mancozeb 63% 75WP @ 0.5%. Apply fungicide suspension in 15-20 cm deep holes at a distance of 30 cm throughout the tree basin
- Clean the affected collar area and apply Chaubatia or Bordeaux paste.
  - Drench the soil under tree canopy with Metalaxyl MZ 72WP @ 0.5% or Mancozeb 75WP @ 0.6% or Copper oxychloride 50 WP 0.6%.
  - Collection and destruction of fallen leaves.
  - Prune cankered and other diseased twigs and ensure their destruction.
  - Apply Chaubatia or Bordeaux paste on pruned areas/wounds/scarified cankered parts.
  - Dormant Spray of copper oxychloride 50 WP @ 0.3%.
- Almond, peach, plum cherry and apricot *Foliar fungal and canker diseases*

### **Impact Points**

- ☞ Ensure orchard sanitation
- ☞ Collection of mummified & rotten fruits from trees and their destruction

### **Vegetables**

- |   |  |   |
|---|--|---|
| Seed crops of tomato, chilli, Capsicum, & brinjal | -  | <ul style="list-style-type: none"> <li>- Select disease-free fruits for seed extraction</li> <li>- Wash extracted seeds thoroughly and sundry followed by proper storage.</li> </ul>  |
| Cabbage, cauliflower.                             | <i>Black rot/ bacterial disease</i>          | <ul style="list-style-type: none"> <li>- Pluck the leaves showing initial symptoms of the disease and ensure the destruction.</li> <li>- If severity is high spray streptomycin @ .02-.03%.</li> <li>- Repeat spray at 10 to 15 days interval if required.</li> </ul> |
|   | <i>Alternaria leaf blight / downy mildew</i> | <ul style="list-style-type: none"> <li>- Pluck the leaves showing initial symptoms of the disease and ensure the destruction.</li> <li>- If severity is more, spray the crop with hexaconazole 5 EC @ 0.3% or ziram 80 WP @ 0.2% or mancozeb 75 WP @ 0.3%.</li> </ul> |
| Leafy vegetables (kale, knol-khol, spinach etc.   | <i>Foliar diseases</i>                       | <ul style="list-style-type: none"> <li>- Pluck the leaves showing initial symptoms of the disease. However, in case of severe infection spray the crop with mancozeb 75 WP @ 0.3% or hexaconazole 5 EC @ 0.03%.</li> </ul>  |

### **Vegetable Science**

- Garlic *Sowing* - Planting of garlic and pran may be continued.
- Impact Points:**
- ☞ Avoid diseased and damaged cloves.
  - ☞ Cloves should be planted deep to avoid frost injury/bird damage.
  - ☞ Cloves may be treated with proper fungicides before sowing as prophylactic measure against fungal disease
- Spinach and Methi *Sowing* ○ Sowing of spinach and methi may be continued
- Impact Points:**
- ☞ Apply sufficient quantity of well rotten FYM to make soil loose and porous.
- Cole crops *Seed Production*
- In in-situ method, rogue out undesirable plants and allow true to type plants to produce seeds.
  - In transplanting method, select true to type plants and replant them at a spacing of 30x45 cm in kale, 30x45 cm in knol khol, 60x45 cm in cabbage and 45x45 cm in broccoli.

- Before replanting, apply well rotten FYM@1.5t and DAP and MOP @ 5kg per kanal.
- Planting must be done in such a way that cabbage head and knob in case of knol khol rests on the soil.

**Impact Points:**

- ☞ To avoid crossing, isolation distance of 1000 m for certified seed must be maintained.
- ☞ Apical rosette in kale and crown in knol khol must not get damaged while transplanting.
- ☞ Outer leaves in cabbage and broccoli must be removed

- Root crops *Seed Production*
- Select true to type roots. Prepare stecklings by trimming two third of top leaving crown intact and by cutting roots about one fourth from tip.
  - Before planting apply 1 t FYM, half Urea @ 4.5 kg, full DAP and MOP@ 10kg and 5kg per kanal respectively.
  - Replant steckling at a distance of 60x30cm on well prepared ridges.

**Impact Points:**

- ☞ To avoid crossing isolation distance of 1000 m should be maintained
- ☞ Turnip should be isolated from sarson also.
- ☞ During selection turnip and radish with pithiness and carrots with large core size should be discarded

- Bulb Crop (Onion) *Seed Production*
- Plant healthy, true to type and medium sized bulbs at a distance of 60x20cm in well prepared land.

**Impact Points:**

- ☞ Avoid diseased and damaged bulbs.
- ☞ Soil should be well drained and loose for proper development of bulbs.

**Fruit Science**

Fruit Harvesting

- Apple (Late varieties) ☞ Fruit should be harvested only after ensuring that they have attained characteristic skin, flesh and seed colour (if not harvested yet).
- White Dotted Red (204-211 DAFB), Ambri ☞ Mature fruits generally tend to hold less tightly to tress and as such detach easily.
- ☞ Specified days after full bloom is another reliable guide for harvesting fruits.
- ☞ Random samples should be subjected to starch-iodine test and starch rating should be from 2-2.5 on 1-6 rating scale for prolonged storage.
- ☞ Fruit firmness test should be done with the help of pressure tester and fruit pressure should range between 15-17 lbs/ sq inch.
- ☞ Make sure that fruits do not get any wound or bruises while harvesting and handling. It will cause rotting of the fruit.
- ☞ Only store unblemished fruit to prevent rotting in storage.
- ☞ Harvested fruit should reach to the cold storage on the same day after pre-cooling
- Pecan nut ☞ Shuck dehiscence, colour making on shell and clean separation of packing tissues from kernel indicates that the nut is ready for picking.
- Kiwi ☞ A maturity index of 6.2 % total soluble solids or more has been found very satisfactory for harvesting.
- ☞ The fruits may be snapped off at base of the fruit leaving the stalk on vine.

Orchard layout and pit digging	<ul style="list-style-type: none"> <li>☞ Although the fruit is quite hard it should still be handled carefully.</li> <li>☞ Layout the orchard in square/rectangular/hexagonal system (as deemed proper under existing circumstances). Pits measuring 1x1x1m should be dug and filling up of pits with a mixture of top soil and 20 kg well rotten FYM per pit should be done.</li> <li>☞ Pits of the same dimensions should be prepared for gap filling also.</li> </ul>
Sanitation of the orchard	<ul style="list-style-type: none"> <li>☞ Removal of suckers and water sprouts.</li> <li>☞ Cleaning of water channels.</li> <li>☞ Collect the fallen leaves and burn them so as to eradicate the primary source of inoculums of various diseases.</li> <li>☞ Ploughing/tractorization of orchard areas for clean cultivation.</li> <li>☞ Clean and store bamboo canes in the shed (or other dry place) to ensure they are still in good condition for the next year.</li> </ul>
Rodents control	<ul style="list-style-type: none"> <li>☞ Various campaign against rodents should also be initiated.</li> </ul>
Marking of trees	<ul style="list-style-type: none"> <li>☞ Trees which are unproductive/ less productive, heavily infested, dry trees should be identified and marked with some paint for top working and/or removal.</li> </ul>
Pruning	<ul style="list-style-type: none"> <li>☞ Arrangements of efficient pruning tools and white led paint should be made.</li> <li>☞ A\Start pruning of fruit trees in second fortnight.</li> </ul>
Nursery land preparation	<ul style="list-style-type: none"> <li>☞ Land should be ploughed to depth of 45cm followed by application of well decomposed FYM @ 15 t/ha.</li> <li>☞ Hardwood cutting can be taken this month for propagation in the coming season.</li> </ul>
Planting of Strawberry	<ul style="list-style-type: none"> <li>☞ Plant strawberry runners for early quality crop in the next season to fetch premium prices.</li> </ul>

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### **Food Sciences & Technology**

Apple	<p><b>Sorting &amp; Grading</b></p> <ul style="list-style-type: none"> <li>- Remove the damaged, diseased and underutilized fruits from the lot.</li> <li>- Grade the fruits on the basis of colour and size in four grades <ul style="list-style-type: none"> <li>A = Extra Large</li> <li>B = Large</li> <li>C = Medium</li> <li>D = Small</li> </ul> </li> <li>- Use the undersized mechanically damaged and irregular shaped apple for processing and value addition.</li> </ul> <p><b>Impact Points:</b></p> <ul style="list-style-type: none"> <li>✓ Graded apples always fetch premium prize as grower gains the confidence of customers and customer gets satisfaction.</li> <li>✓ Graded apples can be traded in international market also.</li> <li>✓ Conversion of C grade apples into processed products increase their value by many folds.</li> </ul> <p><b>Packaging</b></p> <ul style="list-style-type: none"> <li>- Use CF Boxes for packaging of graded apples using fibre trays.</li> <li>- Do not use wooden boxes and avoid use of paddy straw as cushioning material.</li> <li>- For long storage of apples in C.A and Cold Stores, use either plastic crates or CF boxes with outer polyethylene lining or laminations.</li> </ul> <p><b>Impact Points:</b></p> <ul style="list-style-type: none"> <li>✓ Use of CF boxes makes the pack attractive and produce fetches good price.</li> <li>✓ Use of fiber board boxes is internationally accepted and thus the produce can be marketed in international market as well.</li> </ul>
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- ✓ Use of plastic crates or laminated CF Boxes doesn't absorb moisture during long storage and as such maintain the quality and increases shelf life of apples.
- ✓ Prevents microbial infection also.

**Transportation** - Use refrigerated transport for dispatch of apples to distant markets if possible.

**Impact Points:**

- ✓ Maintains quality and increases shelf life.
- ✓ Reduces transport losses.

**Storage** - Store the apples in on-farm storage structures for a very short period of time.

- For long term storage, store only healthy, firm and disease free apples (A and B grade apples) in the C.A Stores at 0-2<sup>o</sup> C depending upon the variety.

O<sub>2</sub> = 2%

CO<sub>2</sub> = 1.5-3.0%

**Impact Points:**

- ✓ May help in regulating the market.
- ✓ Produce fetches good price.
- ✓ Leads to economic gains.

**Whole Walnut**

**Size Grading** ➤ The dried walnuts with a moisture content of 10-12% should be graded into following grades:

Grades	Length (mm)	Width (mm)	Thickness (mm)
Garde-I (very small)	≤ 25	≤ 22	≤ 20
Grade-II (small)	>25- ≤ 32	>22 - ≤ 29	>20 - ≤ 27
Grade-III (large)	>32 - ≤ 39	>29 - ≤ 36	>27 - ≤ 34
Grade-IV (extra large)	>39	>36	>34

- **Note:** - Grading can be done by using sieves already in use or by the power operated walnut developed by AICRP on PHET, Division of FST, SKUAST-K, Shalimar

**Impact Points:**

- ✓ Graded walnuts always fetch better return and help during extraction of kernels either mechanically or manually

**Packaging of walnuts** - Use plastic woven sacks for bulk packaging.

- Do not use gunny bags.

**Impact Points:**

- ✓ Use of gunny bags lead to quality deterioration and microbial infection of walnuts

**Extraction of kernels** - Do not wash the walnuts before extraction of kernels.

**Impact Points:**

- ✓ Maintains the quality of kernels.

**Conditioning of nuts** - Keep thin shelled nuts immersed in water for 8-10 hours only to get the moisture content of 15-18%.

- Keep medium shelled nuts for conditioning for 10-12 hours and thick shelled for 18-20 hours

**Impact Points:**

- ✓ Conditioning helps in extracting the kernels without any mechanical damage or breakage.

**Extraction** - Use only experienced personals.

**Impact Points:**

- ✓ Minimizes the mechanical damage to the kernels and output is more.

**Drying of kernels** - Use solar tunnel dryers or cabinet dryers for drying of kernels to get final moisture content of 4-4.5%.

- Avoid prolonged drying at high temperature (max. temperature of  $40 \pm 2^{\circ}$  C)

**Impact Points:**

- ✓ Minimum quality deterioration of walnut kernels.
- ✓ Economical and time saving

**Packaging** - Use vacuum packaging for walnut kernels.

**Impact Points:**

- ✓ Maintains the quality and increases the shelf life.

**Storage** - Storage both walnuts and kernels at a temperature of  $8-10^{\circ}$  C with RH of 68-70% under dark conditions.

**Impact Points:**

- ✓ Maintains the quality and increases the shelf life.

**Quince** Conversion ➤ Quince being rich in pectin and other nutrients can be converted into value added products following value added products:

1. Quince Jam
2. Quince Jelly
3. Quince Preserve
4. Dried Quince rings

**Impact points:**

- ☞ Reduces post harvest losses.
- ☞ Value added products fetch better returns.

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### Floriculture and Landscape Architecture

Spring flowering Annuals	<i>Transplanting</i>	- Transplanting of Spring flowering annuals like Pansy, California poppy, Candy tuft, Verbena, Sweet pea, Sweet william etc
Cut flowers, Gerbera Carnation Chrysanthemum	<i>Inter cultural operations</i>	- Regular weeding, application of proper fertilizer doses, irrigation, right method of harvesting and post-harvest management should be ensured.
Shrubs Edges	<i>Intercultural operations</i>	- Hedges/edges should be trimmed regularly in such a way that plants are prepared for winter care.
Tulip, Hyacinth, oxalis, freesia, fritillaria, Dutch Iris etc.	<i>Bulb planting</i>	- Time for planting of bulbs of Tulip, Hyacinth, oxalis, Freesia, Fritillaria, Dutch Iris etc.
Lilium, Gladiolus, Dahlia	<i>Bulb /Corm /tuber Lifting and storage</i>	- Lifting of Lilium bulbs and store in coca peat etc under well ventilated conditions - Lifting of Gladiolus corms - Lifting of Dahlia Tubers

## Soil Science

### **Orchard Soil Sampling**

In established orchards soil sampling is done for diagnosis of soil-related problems involving poor tree performance.

Soils are variable. In fact, most surface soils vary a great deal within short distances across the landscape. The variability is much greater than most people realize. Some of the variability can be seen or anticipated because of obvious differences in slope, depth, texture, etc. However, much of the variability is not visible, either because it is below the soil surface or cannot be detected except by soil tests. To obtain samples that represent conditions in the field, it is extremely important that the sampler closely follow the sampling instructions given.

- Divide the orchard into blocks based on soil survey data, slope, cropping history, variety, rootstock, age, growth pattern, irrigation system and visible soil characteristics
  - Even when an orchard appears to be uniform, it is worth dividing it into several blocks which are sampled and analysed separately. Ideally, an orchard is divided into blocks of 2-5 acres.
  - Soil samples are taken from the entire orchard by walking a zigzag course around or through the area, if variability exists.
  - The sample is taken halfway between the trunk and the drip line area especially at the drip line.
  - Remove the plant residue from the soil surface.
  - Dig a pit of 1m depth up to convenient size at drip line area, Sample by 30 cm increments to a depth of 1m.
  - Separate soil samples should be collected from each layer starting from 1<sup>st</sup> layer followed by 2<sup>nd</sup> and 3<sup>rd</sup>.
  - Collect the sub samples in a clean plastic bucket layer wise.
  - Mix the sub samples thoroughly; remove large stones, pieces or roots and other foreign material.
  - Quartering the sample till the desired amount of 500 gms- 1Kg is obtained layer wise.
  - Very wet samples should be air-dried before packaging.
  - Put the soil in a clean cloth bag layer wise and label it clearly. Follow the instructions of the laboratory that will do the analysis
  - To receive accurate fertilizer recommendations, the sample information sheet needs to be filled out carefully.
  - The information sheet Includes:  
NAME OF FARMER:  
PARENTAGE:  
VILLAGE NAME:  
NAME OF CROP:  
VARIETY:  
AGE:  
IRRIGATED/UNIRRIGATED:  
DETAILS OF FERTILIZATION OR ANY OTHER CHEMICAL SPRAYED WITH DATE:  
OTHER INFORMATION (PROBLEM IF ANY):
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## Division of Veterinary Paracitology

### Deworming and Dipping Schedule for the Livestock of Kashmir Valley

S. No	Diseases	Dosing schedule	Remarks
1.	Deworming against Fasciolosis in sheep in endemic areas	☞ Mid autumn/late autumn (15 <sup>th</sup> October to 14 <sup>th</sup> November)	Very important in marshy and low lying areas where sheep are fed mainly on paddy hay during winter but can be followed in all parts of Kashmir valley, if needed.
02.	Deworming against fasciolosis in cattle in endemic areas	☞ Late autumn (1 <sup>st</sup> to 30 <sup>th</sup> November)	Very important in marshy and low lying areas where cattle are fed mainly on paddy hay during winter but can be followed in all parts of Kashmir valley, if needed.
03.	Deworming against round worms in sheep, cattle and horses	☞ Late autumn (1 <sup>st</sup> to 30 <sup>th</sup> November)	In all areas of Kashmir valley
04.	Deworming against tapeworms in calves, lambs, kids & foals	☞ Late autumn (1 <sup>st</sup> to 30 <sup>th</sup> November)	In all areas of Kashmir valley
05.	Prophylactic measures against ecto-parasites like ticks & mange	☞ Late autumn (1 <sup>st</sup> to 30 <sup>th</sup> November)	In all areas of Kashmir valley
06.	Preventive medication against poultry coccidiosis	☞ Prolonged or continuous use of coccidiostatic compounds in feed & water	All commercial poultry farms but their use should be discontinued at a suitable period before marketing of birds depending on drug

A broad spectrum anthelmintic like albendazole or a drug combination containing flukicide, anti-nematodal and anti-cestodal preparation can be used for common dosing against trematode, nematode & cestode parasites. However selective de worming of heavily infected animals in a herd after assessing parasitic load may also be employed as and when needed.

S/d  
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