LECTURE 7
LENTIL
Lens culinaris

• Importance
  – Consumed as dry seed
  – In India as flour, dal (boiled, smashed in to soup), several snacks and sweets
  – Rich source of calcium, phosphorous and iron
  – Protein 24-26%
  – Also rich in vitamins

• Global area production
  – 5% of pulses
  – 3.3 million ha &
  – 2.9 million t

• Predominantly grown in Asia (80%)
• Also grown in N & E Africa, N-C America, S. Europe

Area in India

<table>
<thead>
<tr>
<th>State</th>
<th>Area</th>
<th>Production</th>
<th>t/ha</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP</td>
<td>0.55</td>
<td>0.45</td>
<td>0.81</td>
</tr>
<tr>
<td>MP</td>
<td>0.49</td>
<td>0.24</td>
<td>0.48</td>
</tr>
<tr>
<td>Bihar</td>
<td>0.17</td>
<td>0.10</td>
<td>0.58</td>
</tr>
<tr>
<td>WB</td>
<td>0.05</td>
<td>0.04</td>
<td>0.84</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>0.01</td>
<td>0.03</td>
<td>1.01</td>
</tr>
<tr>
<td>All India</td>
<td>1.34</td>
<td>0.88</td>
<td>0.66</td>
</tr>
</tbody>
</table>
• **Origin**
  - Egypt is its origin. It is grown in Spain, Pakistan, Bangladesh and Syria
  - Broadly classified as microsperma and macrosperma
    - Microsperma are predominantly cultivated in India
    - Macrosperma are large sized grains cultivated in Mediterranean region
  - To mention some varieties in India
    - Pant L 406, 639, Pant L 4
    - DPL 15 and DPL 62

• **Climate**
  As the crop requires very cool climate it is cultivated in winter season. It can tolerate severe winter and frost condition also.

• **Soil**
  The suitable soil types are alluvial are black cotton soils.

• **Varieties**
  Pusa-1, Pusa-4, Pusa-6, Pusa-206, Pant-209, T-36, B-77, Pant L-639.

• **Cultivation practises**
  Lentil is grown as second crop after rice. The seeds are also sown broadcast in standing rice crop without any field preparation.

• **Seeds and sowing**
  The seeds are sown in lines at 20 -30 am apart using 30 -50kg seed/ha.

• **Fertilizer management**
  The crop may be grown on residual fertility. Application of 15 kg N and 40 kg P₂O₅ per hectare gives better yield.

• **Water management**
  If there is no winter rain one or two light irrigation at flowering and grain filling stages are given.

• **Yield**
  The crop produces 8 – 9 quintals/ha under rainfed and 18-20 quintals/ha under irrigated condition with god fertilizer management.

**Multiple choice questions**

1. Centre of origin of Lentil is ____________
   a. America   b. S. Africa   c. Mediterranean region
2. The inflorescence in lentil is ________
   a. Raceme   b. Spikelets   c. Panicle
3. The recommended seed rate for lentil is ________kg/ha
   a. 8-10   b. 75-100   c. 30-40
4. Lentil crop needs
   a. Cool & dry climate   b. Warm & humid   c. Dry & hot climate
5. The row to row spacing by pora method of sowing of lentil is_______cm
   a. 30   b. 10   c. 50
6. The row to row spacing for late sowing of lentil is_______cm
   a. 50   b. 20   c. 30
7. Lentil contains about _______% protein
   a. 20   b. 25   c. 10
8. Weed in lentil can be controlled by applying
   a. 2,4-D   b. Fluchloralin   c. both
9. The insect pod borer is commonly found on
   a. Wheat   b. Lentil   c. Maize
10. Lentil belongs to family
    a. Leguminosae   b. Linaceae   c. Tiliaceae