

## COWPEAS

Cowpeas are mostly grown in rainfed areas during rainy season as a mixed crop with maize or as a pure crop. It is an important pulse crop in the intermediate region of Jammu province. For getting higher yield from this crop, the following package of practices are recommended:-

**VARIETIES:** C-152, PS-42, CULTURE- 1

**CLIMATE:** It requires warm climate and can be grown during summer and kharif seasons.

**SOIL:** It thrives best on light to heavy loam soils with good drainage facility especially during rainy season. However for summer crop (March-June) heavy soils are better, since such soils are water retentive and as such number of irrigations required are less.

**LAND PREPARATION:** 2 to 3 ploughings followed by sohaga are sufficient to get good seed bed. The field should be free from root stubble, grasses, and clods.

**MIXED CROPPING:** For Zone No. III cowpeas can be sown mixed with maize and in Zone No. II with bajra. Sow one row of cowpeas and two rows of maize/bajra.

**TIME OF SOWING:** During summer it should be sown from 15th to 30th March under irrigated condition in the areas of Jammu plains. In fact it can be sown after the harvest of sarson and barley as a third crop in sequence in paddy growing areas especially with culture-1 variety.

During kharif it should be sown with the onset of monsoon upto 10th July. However its sowing can be extended upto 3rd week of July with culture-1 variety in sub-tropical areas. In hills its sowing time coincides with time of maize sowing.

**SEED RATE:** Use 20-25 kg/ha seed for pure crop and 10 kg/ha for mixed crop with maize.

**INOCULATION:** Inoculate the seeds with Rhizobium culture before sowing.

**FERTILIZER APPLICATION:** As a pure crop, it requires 18 kg N and 46 kg P/ha i.e 100 kg DAP, When grown mixed with maize use N,P,K doses as required for maize. For additional benefit use Rhizobium culture.

**IRRIGATION:** It should be grown as irrigated crop during summer season in Jammu plains. Under such conditions it require 4-6 irrigations under light soil and 2-3 under heavy soil conditions. During summer it should be sown in heavy soil where paddy is grown. One irrigation 15-20 days after germination and two during flowering are sufficient to get higher yield. During kharif it is grown as rainfed crop only.

**HOEING AND WEEDING:** Care should be taken that during the first month of the crop there should be no weeds in the crop. As such one weeding 15-20 days after germination is sufficient. It forms canopy at a very early stage and there by has a smothering effect on weeds.

**HARVESTING:** It requires two pickings and then final harvesting. At the time of harvesting green stalks can be fed to the cattle as fodder after picking the matured pods during both the season.

**YIELD:** The yield varies from variety to variety. The higher yield is obtained from C-152 variety, although its grains are of brown colour. It yields 15 to 20 q/ha during summer and 8-10 q/ha during rainy season. Other varieties yield less than this variety but grain quality is better, being milky white in colour.