

LIST OF FIGURES

Plate No.	Particulars	Page No.
3.1.a.	Depicted on seedling height in different doses of gamma rays in Pea <i>cv.</i> Arkel	66
3.1.b.	Preparation of field sowing in gamma radiated seeds for M ₁ generation (2011-12).	66
3.2.a.	Chlorophyll mutants in Pea (Based leaf colouration)	67
3.3.a.	Overall view some gamma treatments of pollen sterility in M ₁ generation	68
3.4.a.	Overview pods types mutants in pea	73
3.4.b.	A view of plant stature in mutants pea	73
3.5.a.	Showed of maturity stage in mutant Pea	74
3.5.b.	Different pod types in mutant pea	74
3.6.a.	Mutant light green colour seeds in pea	75
3.6.b.	Mutant brown colour seeds in pea	75
3.6.c.	Mutant light white colour seeds in pea	75
3.7.a.	Overview of moisture stress condition in flowering stage for M ₂ and M ₃ generations	76
3.7.b.	Exhibit in detected mutant leaf of relative water content in pea	76
3.7.c.	Estimated of soil moisture content incubated into hot oven	76
3.8. a.	Observation recorded of chlorophyll content with help of Spectrophotometer	82
3.8.b.	Showed in early flowering of M ₂ generation in pea plants (<i>Rabi</i> 2012-13)	82
3.9.a.	Exhibited of highly pod mutant in pea of the M ₂ generation	83
3.9.b.	Overview of the experimental plots <i>Rabi</i> , 2012-13 along with Advisor: Dr. A. K. Chaurasia	83
3.10.a.	Depicted of long plant height in mutant pea for M ₃ generation (2013-14)	84
3.10.b.	Overview of the experimental plots <i>Rabi</i> , 2013-14	84
3.11.a.	Putting on BP method in different gamma radiated M ₁ harvested Pea seeds and keeping under walk-in germination chamber	85
3.11.b.	Overview of different gamma treatments in germinated pea seeds	85
3.11.c.	Evaluated seedling length with help of graph paper in different radiated pea seeds	85
Figure No.	Particulars	Page No.
3.1a	Field experimental layout in M ₂ generation <i>Rabi</i> 2012-13.	64
3.2b	Field experimental layout in M ₃ generation <i>Rabi</i> 2013-14.	65
1	Determination graphical presentation of LD ₅₀ value of gamma rays in Pea	100
2	Effect of gamma rays on germination and plant survival (per cent) of control in M ₁ generation of pea <i>cv.</i> Arkel	101
3	Effect of gamma rays on pollen sterility and fertility percent in M ₁ generation of pea <i>cv.</i> Arkel	101
4	Genotypic and phenotypic coefficient of variation for 13 characters in M ₂ generation of Pea <i>cv.</i> Arkel	135
5	Heritability broad sense and genetic advance as per cent of mean	135

	for 13characters in M ₂ generation of Pea cv. Arkel	
6	Genotypic and phenotypic coefficient of variation for 13characters in M ₃ generation of Pea cv. Arkel	140
7	Heritability (per cent) and genetic advance as per cent of mean for 13characters in M ₃ generation of Pea cv. Arkel	140
8	Genotypic coefficient of variation influencing seed yield in M ₂ generation of Pea cv. Arkel	146
9	Phenotypic coefficient of variation influencing seed yield in M ₂ generation of Pea cv. Arkel	146
10	Genotypic coefficient of variation influencing seed yield in M ₃ generation of Pea cv. Arkel	154
11	Phenotypic coefficient of variation influencing seed yield in M ₃ generation of Pea cv. Arkel	154
12	Genotypic path diagram of factors influencing seed yield in M ₂ generation of Pea cv. Arkel	159
13	Phenotypic path diagram of factors influencing seed yield in M ₂ generation of Pea cv. Arkel	159
14	Genotypic path diagram of factors influencing seed yield in M ₃ generation of Pea cv. Arkel	164
15	Phenotypic path diagram of factors influencing seed yield in M ₃ generation of Pea cv. Arkel	164