LIST OF TABLES

Table no.

1. Morphological characteristics of the three okra cultivars.

2. Mutagenic treatments, dose rates, doses, cultivars and type of studies undertaken.

3. \(M_1\) plant, fruit and seed characters following gamma ray treatment.

4. Effects of EMS treatment on \(M_1\) seedling characters.

5. Effects of EMS treatment on \(M_1\) plant parameters.

6. RBE of fast neutrons based on \(D_{50}\) doses of \(M_1\) parameters.

7. Frequency of gamma ray induced chlorophyll mutations in \(M_2\).

8. Comparison of chlorophyll mutations within the 83 bulked \(M_1\) plant progenies; based on 100 \(M_1\) plants.

9. Comparison of chlorophyll mutations within the 83 bulked \(M_1\) plant progenies, based on 100 \(M_2\) seedlings.

10. Chlorophyll mutation frequency in \(M_2\) based on fruit position.
11. Frequency of fast neutron induced chlorophyll mutations in M₂.

12. Frequency of EMS induced chlorophyll mutations in M₂.

13. Frequency of gamma ray induced viable mutations in M₂.

14. Frequency of fast neutron and EMS induced viable mutations in M₂.

15. Mutagenic effectiveness and efficiency of gamma rays for chlorophyll mutants.

16. Mutagenic effectiveness and efficiency of gamma rays based on viable mutants.

17. Mutagenic effectiveness and efficiency of EMS based on chlorophyll and viable mutants.

18. M₂ mutation spectrum of viable mutants from first fruit on main stem.

19. M₂ mutation spectrum of viable mutants from bulked seeds.

20. Identification and classification of viable mutations.

21. Plant height at first flowering, and fruit length and girth in some mutants.

22. Flowering habit of some mutants in M₅ and M₇ generations.

23. Fruit number at harvest in some mutants in M₅.
24. Length, girth, and weight of fruits of thick fruit mutant at 10 days maturity and yield.

25. Fruit number in two mutants and Pusa Sawani in $M_5$ generation.


27. $F_1$ plant characters and heterosis in intermutant crosses.

28. $F_1$ plant characters and heterosis in crosses of mutants with Pusa Sawani.

29. $F_1$ phenotypes and the segregation in $F_2$ of reciprocal crosses between parent Pusa Sawani and mutants.

30. Segregation of the drooping and dwarf mutants.

31. Mutant gene symbols in twelve induced mutants.

32. Characters of $F_1$ and $F_1M_1$ hybrids of three cultivars of okra.

33. Segregation for purple pigmentation of seedlings in $F_2$ and $F_3$ intercultivaral crosses.

34. Segregation for purple pigmentation of seedlings in $F_2M_2$ and $F_3M_3$ of intercultivaral crosses.

35. Plant characters altered.