LIST OF TABLES AND APPENDICES

Tables | Details of Tables
---|---
Table 1: | Effects of mutagens on seed germination, survival and pollen fertility in $M_1$ generation of mungbean var. PDM-11.
Table 2: | Effects of mutagens on seed germination, survival and pollen fertility in $M_1$ generation of mungbean var. NM-1.
Table 3: | Effects of mutagens on seedling growth in $M_1$ generation of mungbean var. PDM-11.
Table 4: | Effects of mutagens on seedling growth in $M_1$ generation of mungbean var. NM-1.
Table 5: | Frequency of cotyledonary abnormalities in $M_1$ generation of mungbean var. PDM-11.
Table 6: | Frequency of cotyledonary abnormalities in $M_1$ generation of mungbean var. NM-1.
Table 7: | Frequency of leaf abnormalities in $M_1$ generation of mungbean.
Table 8: | Effects of mutagen on seed germination and pollen fertility in $M_2$ generation of mungbean.
Table 9: | Frequency and spectrum of chlorophyll mutants in $M_2$ generation of mungbean var. PDM-11.
Table 10: | Frequency and spectrum of chlorophyll mutants in $M_2$ generation of mungbean var. NM-1.
Table 11: | Effectiveness and efficiency of the mutagens in $M_2$ generation of mungbean var. PDM-11.
Table 12: | Effectiveness and efficiency of the mutagens in $M_2$ generation of mungbean var. NM-1.
Table 13: | Mutational rate of the mutagens in relation to biological damage in two varieties of mungbean.
Table 14: | Mutagen induced chlorophyll mutations spectrum in mungbean.
Table 15: | Comparative mutagen induced chlorophyll mutations spectrum in mungbean.
Table 16: Frequency (per cent M₂ plants) and spectrum of morphological mutants induced by various chemical mutagens in M₂ generation of mungbean.

Table 17: Total (pooled) frequency and spectrum of different types of morphological mutants induced in M₂ generation of mungbean.

Table 18: Estimates of mean values (X), shift in X and genetic parameters for days to flowering in M₂ generation of mungbean var. PDM-11.

Table 19: Estimates of mean values (X), shift in X and genetic parameters for days to flowering in M₂ generation of mungbean var. NM-1.

Table 20: Estimates of mean values (X), shift in X and genetic parameters for plant height (cm) in M₂ generation of mungbean var. PDM-11.

Table 21: Estimates of mean values (X), shift in X and genetic parameters for plant height (cm) in M₂ generation of mungbean var. NM-1.

Table 22: Estimates of mean values (X), shift in X and genetic parameters for days to maturity in M₂ generation of mungbean var. PDM-11.

Table 23: Estimates of mean values (X), shift in X and genetic parameters for days to maturity in M₂ generation of mungbean var. NM-1.

Table 24: Estimates of mean values (X), shift in X and genetic parameters for number of fertile branches in M₂ generation of mungbean var. PDM-11.

Table 25: Estimates of mean values (X), shift in X and genetic parameters for number of fertile branches in M₂ generation of mungbean var. NM-1.

Table 26: Estimates of mean values (X), shift in X and genetic parameters for pods per plant in M₂ generation of mungbean var. PDM-11.

Table 27: Estimates of mean values (X), shift in X and genetic parameters for pods per plant in M₂ generation of mungbean var. NM-1.

Table 28: Estimates of mean values (X), shift in X and genetic parameters for pod length (cm) in M₂ generation of mungbean var. PDM-11.

Table 29: Estimates of mean values (X), shift in X and genetic parameters for pod length (cm) in M₂ generation of mungbean var. NM-1.
Table 30: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for number of seeds per pod in M2 generation of mungbean var. PDM-11.

Table 31: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for number of seeds per pod in M2 generation of mungbean var. NM-1.

Table 32: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for 100-seed weight (g) in M2 generation of mungbean var. PDM-11.

Table 33: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for 100-seed weight (g) in M2 generation of mungbean var. NM-1.

Table 34: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for total plant yield (g) in M2 generation of mungbean var. PDM-11.

Table 35: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for total plant yield (g) in M2 generation of mungbean var. NM-1.

Table 36: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for days to flowering in M3 generation of mungbean.

Table 37: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for plant height (cm) in M3 generation of mungbean.

Table 38: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for days to maturity in M3 generation of mungbean.

Table 39: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for fertile branches per plant in M3 generation of mungbean.

Table 40: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for pods per plant in M3 generation of mungbean.

Table 41: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for pod length (cm) in M3 generation of mungbean.

Table 42: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for number of seeds per pod in M3 generation of mungbean.

Table 43: Estimates of mean values ($\overline{X}$), shift in $\overline{X}$ and genetic parameters for 100-seed weight (g) in M3 generation of mungbean.
Table 44: Estimates of mean values (\( \bar{X} \)), shift in \( \bar{X} \) and genetic parameters for total plant yield (g) in M\(_3\) generation of mungbean.

Table 45: Brief description of the mutants isolated in M\(_3\) generation of mungbean.

Table 46: Estimates of mean values (\( \bar{X} \)), range and genetic parameters for various quantitative traits of the mutants isolated in M\(_3\) generation of mungbean var. PDM-11.

Table 47: Estimates of mean values (\( \bar{X} \)), range and genetic parameters for various quantitative traits of the mutants isolated in M\(_3\) generation of mungbean var. NM-1.

Table 48: Phenotypic correlation coefficient between different pairs of characters in M\(_3\) mutants of mungbean.

Table 49: Range, mean, coefficient of variation and correlation coefficient for seed protein content in M\(_3\) mutants of mungbean.

Appendices

Appendix I: Estimates of mean values (\( \bar{X} \)) and coefficient of variation (CV\%) for various quantitative traits in M\(_1\) generation of mungbean var. PDM-11.

Appendix II: Comparative effects of mutagens on mean and coefficient of variation for various quantitative traits in M\(_1\) generation of mungbean var. PDM-11.

Appendix III: Estimates of mean values (\( \bar{X} \)) and coefficient of variation (CV\%) for various quantitative traits in M\(_1\) generation of mungbean var. NM-1.

Appendix IV: Comparative effects of mutagens on mean and coefficient of variation for various quantitative traits in M\(_1\) generation of mungbean var. NM-1.

Appendix V: Reagents used in seed protein estimation.