CONCLUSION
7. CONCLUSION

Three separate experiments were conducted as a part of the investigation entitled "Evaluation of Glory Lily (Gloriosa superba L.) for high yield and alkaloid content". Based on the results obtained in each of these trials, the following conclusions may be drawn.

Among the 17 diverse germplasm collections evaluated for genetical parameters like variability, GCV, PCV, heritability, genetic advance, association of characters and path coefficient analysis, a wide range of variation was observed for various morphological and yield characters. The traits days to sprouting, plant height, number of leaves per vine, leaf area per vine, days to first flowering, number of branches per vine, days to 50 per cent flowering, number of pods per vine, pod length and colchicine content exhibited a strong association with seed yield per vine.

The path coefficient revealed that seed yield was influenced by the direct positive effects of days to first flowering, number of branches and number of pods per vine and pod length.

The germplasm collections Singleri, Markampatti and Kottapatti in that order have recorded higher seed yield per vine.

The problem of fruit set in G. superba L. can be attributed the improper pollination due to deflexed position of stigma which can be improved by hand pollination of flowers one day after anthesis.
Among the various growth retardants tried, the higher concentration of TIBA (300 ppm) besides reducing the vegetative growth enhanced the number of branches per vine, number of pods per vine, number of seeds per pod, test weight of seeds and thus, ultimately increased the seed yield per vine and per unit area.

SCOPE FOR FURTHER WORK

1. In the present investigation on the evaluation of Glory Lily germplasm collections from Singleri, Markampatti and Kottapatti have performed well in respect of the growth and seed yield. However, multilocation trials need to be conducted to know their performance under different agroclimatic zones before releasing them as varieties.

2. The study on the use of growth regulators has been conducted in one season only. It may be appropriate to conduct confirmatory trials before using them for large scale cultivation.

3. Appropriate production technology for organic and eco-friendly farming, may be developed for these newly developed varieties in consonant with Good Agricultural Practices (GAP).