plant corresponds to a number of branches on the plant and the fruit weight gained. The total yield per plant and yield per hectare increased with pinching treatment. Results from this study suggest that small landholder farmer can pinch their plants to encourage a lower pinch sex ratio and higher yield. Indeed, the farmer can their plants at 20 DAT to attain maximum female flowers and hence more fruits.

Farmers are suggested and recommended to follow an appropriate time of pinching for increasing yield. Further studies with other pinching methods can be conducted to see their effect on plants. The varietal parameter should be considered for another research. This research was carried out in only one season and at only one location. So, this experiment should be further verified by conducting similar research at different locations.

Authors' contributions

AP carried out the conceptualization of research, designed the experiment and drafted the manuscript. AP participated in the design of the study and helped in data collection. AP helped in data analysis and helped to draft the manuscript. BS helped to draft the manuscript and supervision of the research. All authors read and approved the final manuscript.

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Conflict of Interest Disclosure

The authors affirm that this research was conducted without any commercial or financial relationships that could be construed as a potential conflict of interest.

References

Anand M., Rohini N., and Sadasakthi A., 2014, Influence of training and pinching on growth, flowering and physiological characters in bottle gourd cv. CBgH1, Trends in Biosciences, 7(17): 2524-2527.

Bhowmick B.K., and Jha S., 2015, Dynamics of sex expression and chromosome diversity in Cucurbitaceae: A story in the making, Journal of Genetics, 94(4): 793-808.
https://doi.org/10.1007/s12041-015-0562-5

Cao D., Chabikwa T., Barbier F., Dun E.A., Fichtner F., Dong L., Kerr S.C., and Beveridge C.A., 2023, Auxin-independent effects of apical dominance induce changes in phytohormones correlated with bud outgrowth, Plant Physiology, 192(2): 1420-1434.
https://academic.oup.com/plphys/article/192/2/1420/6998600

Chapagain U., Bhandari S., Shrestha Y.M., Bista S., and Dahal J., 2022, Effect of pruning and fertilizers on growth, flowering and yield of cucumber (*Cucumis sativus* L.) under protected structure in Panchthar, Nepal, International Journal of Applied Sciences and Biotechnology, 10(3): 171-181.
https://doi.org/10.3126/ijasbt.v10i3.47521

Chaurasiya D.K., Kumar M., Sahni S., and Singh S., 2020, 3G cutting: A wonderful technique to redouble the production of cucurbits, Biotica Research Today, 2(12): 1308-1310.

Ghosh A., Chikara J., and Chaudhary D., 2011, Diminution of economic yield as affected by pruning and chemical manipulation of *Jatropha curcas* L., Biomass and Bioenergy, 35(3): 1021-1029.
https://doi.org/10.1016/j.biombioe.2010.11.019

Kandel R., and Sah S.K., 2023, Performance of grafted bitter gourd (*Momordica charantia* L.) at different pruning and nitrogen levels in Nawalparasi East, Nepal, Nepalese Horticulture, 17(1): 22-30.
https://doi.org/10.3126/nh.v17i1.60626

Li D., Sheng Y., Niu H., and Li Z., 2019, Gene interactions regulating sex determination in cucurbits, Frontiers in Plant Science, 10: 1231.
https://doi.org/10.3389/fpls.2019.01231

MoALD, 2024/25, Statistical information on Nepalese agriculture, Agriculture Ministry of Nepal.

Mukherjee P.K., Nema N.K., Maity N., and Sarkar B.K., 2013, Phytochemical and therapeutic potential of cucumber, Fitoterapia, 84: 227-236.
https://doi.org/10.1016/j.fitote.2012.10.003

Naafe M., Nabi G., Irshad M., Khan M.N., Ali S., and Hayat R., 2022, Influences of pinching on growth and yield of bottle gourd (*Lagenaria siceraria*), Pure and Applied Biology, 11(4): 891-901.

Rafeekher M., Nair S.A., Sorte P.N., Hatwar G.P., and Chandan P.M., 2002, Effect of growth regulators on growth and yield of summer cucumber, Journal of Soils and Crops, pp.108-110.

Rajput V., Abhishek Kumar J., and Tomar S., 2020, Effect of pinching and spacing on growth parameters of African marigold (*Tagetes erecta* L.), Plant Archives, 20: 533-537.