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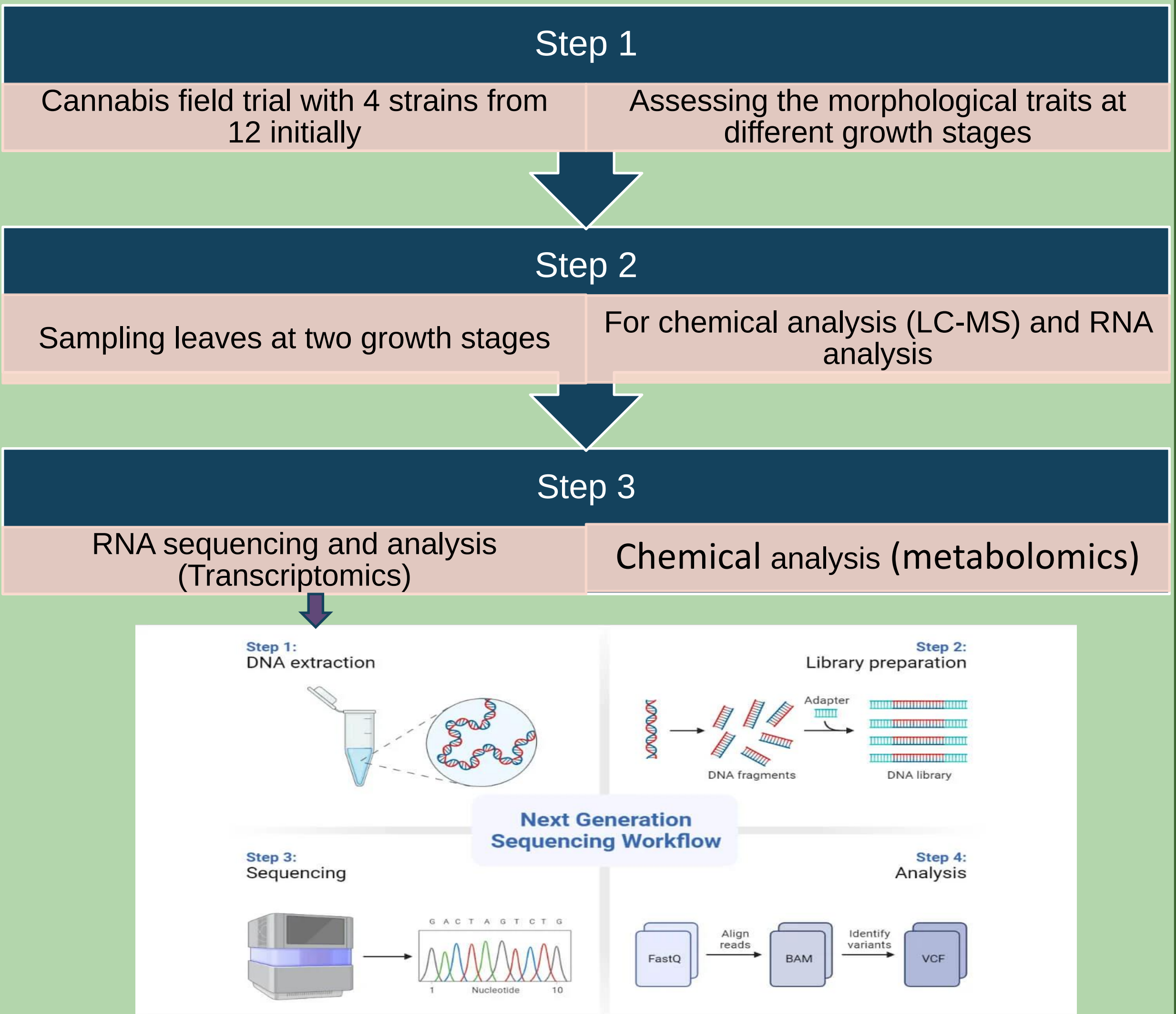
Introduction

Cannabis sativa L. (cannabis), is an important medicinal plant that contains several classes of secondary metabolites and has been used for centuries as an herbal medicine. One of the significant classes of secondary metabolites found in cannabis other than cannabinoids are the flavonoids with diverse biological activities such as the ability to scavenge hydroxyl radicals amongst others. Flavonoids are widely distributed in plants and form part of the response mechanism to abiotic stresses. About 26 flavonoids have been reported to be present in cannabis.

Aim

The aim of the proposed study is to analyse the transcriptomic and metabolomics of flavonoids biosynthesis and the variability of flavonoid accumulation in different varieties of cannabis indigenous to Southern Africa

Research strategy

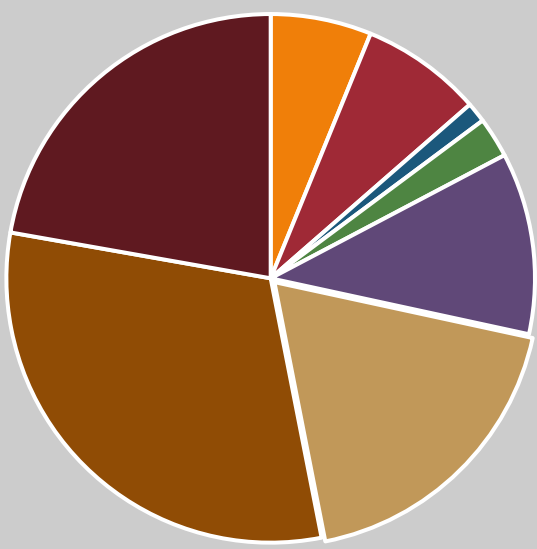


Results & Discussion



Figure 1. Germination rate of cannabis landrace varieties after a week of sowing

Cannabis strains germination rate from 30 seeds each



Mtheri Likhetha Khalasi Mpondo
Ugwayi Ohlaza Ugwayi Wezulu Local No.1 Intsangu

Figure 2. Germination rate of cannabis landraces from 12 varieties

Discussion

- There were a total of 12 cannabis landrace varieties and out of the 12, 30 seeds from each were sown in seedling trays
- The cannabis strains that had at least 9 plants germinated were transferred to the field for the trial.
- Out of 12 cannabis varieties only 4 varieties had 9 and more plants, the rest were discarded
- The 4 varieties at the field trial were assessed for their morphological traits at 1month after planting, with the data corroborating their distinctiveness
- The next steps to follow are morphological traits assessment at 3 months and therefore sampling
- Sampling will occur at two growth stages before and after flowering and thereafter transcriptomic and metabolomics analysis to follow.

References

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Acknowledgements