A Comparative Study of Strawberry (Fragaria sp.) Yield and Growth Parameters in Indoor Controlled Environment Agriculture.

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1 Objectives

- Evaluate Cultivar Suitability for Indoor Farming
- Optimize Indoor Propagation Techniques
- Analyze Growth and Yield Performance
- Investigate the Impact of Environmental Controls
- Identify Cultivar-Specific Challenges and Advantages

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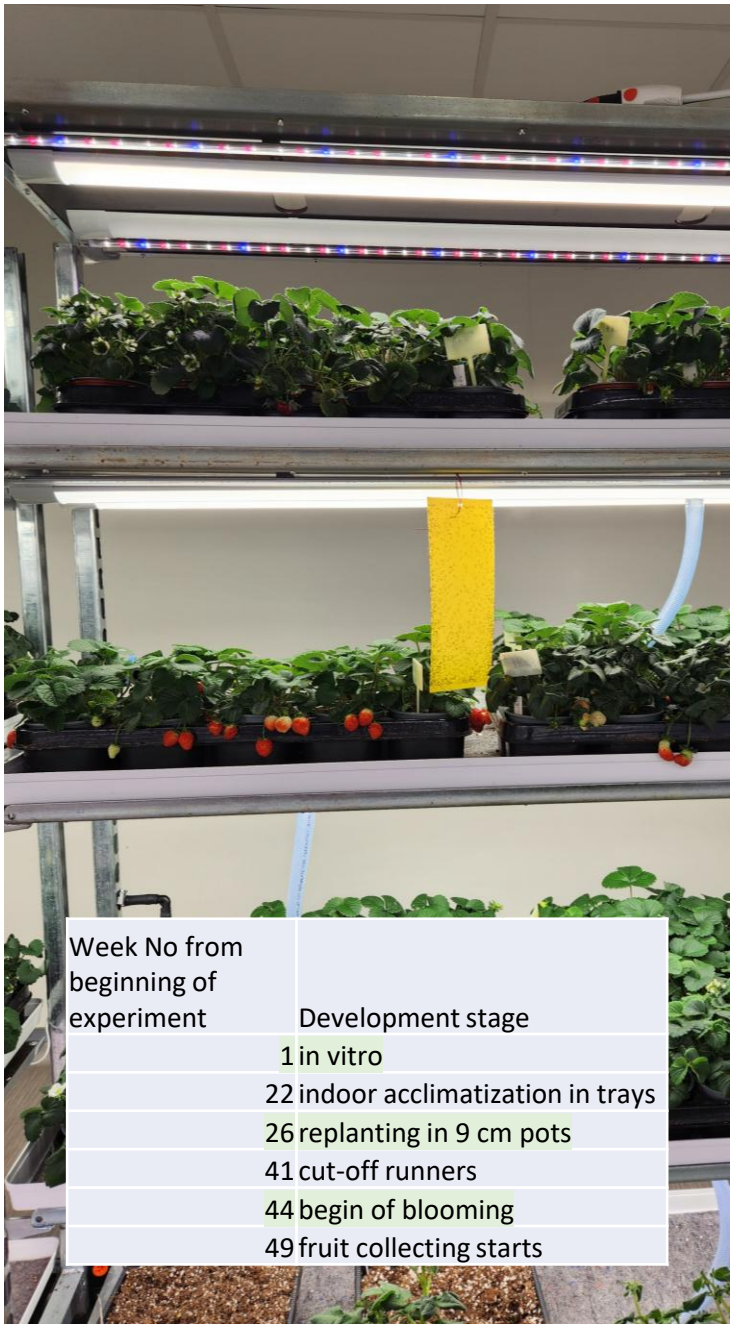
2. Material and Methods

Varieties: 'Albion' (dn), 'Charlotte'(eb) 'Sonata' (ms).
In vitro cultivation period.
Acclimatization and growth in pots.
Runner production and stimulation for flowering.



Week No from beginning of experiment	Development stage
1	in vitro
22	indoor acclimatization in trays
26	replanting in 9 cm pots
41	cut-off runners
44	begin of blooming
49	fruit collecting starts

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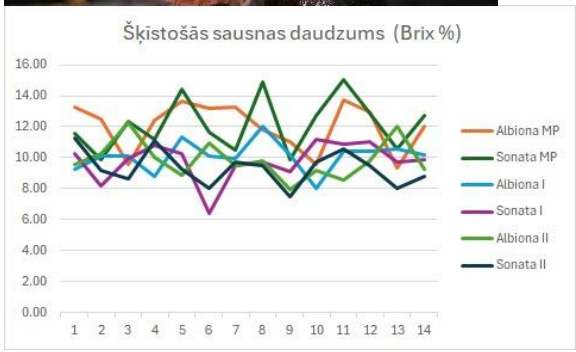
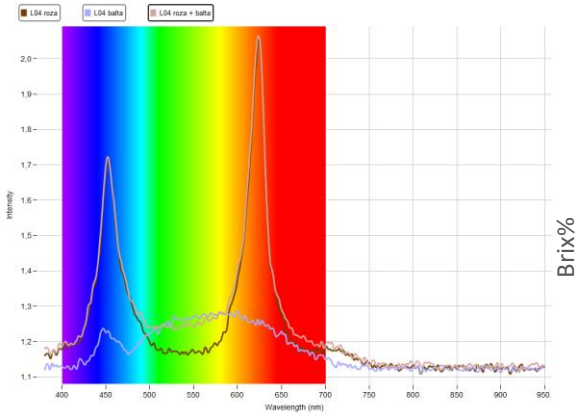
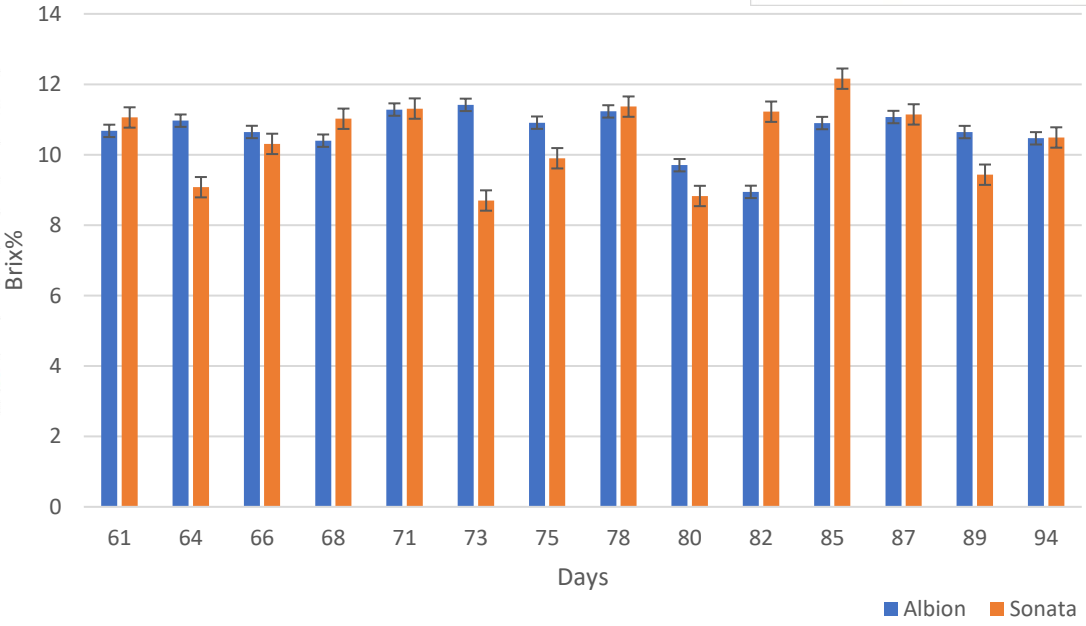
3. Results and Discussions

Efficiency of Cultivar Propagation
Strawberry Yield Analysis
Cultivar-Specific Observations
Environmental and Management Factors
Comparative Analysis with Other Studies







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4. Conclusions and Perspectives

- 'Sonata' is the most effective cultivar for indoor farming, demonstrating high yield and berry production.
- Despite 'Charlote's' high BRIX percentage indicating a higher sugar content, its moderate growth and yield make it less suitable for consistent indoor cultivation compared to 'Sonata' and ‘Albion’.
- 'Albion' presents a balanced option with good berry quantity, weight, and moderate sugar content, although its performance is slightly overshadowed by 'Sonata'.
- Further research is needed to refine cultivation techniques and understand cultivar-specific responses to controlled environments.

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