

Plant cell technologies of **Sandream**

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Sandream

Help People Look Good. Feel Great

Plant cell technologies of Sandream

Plant cell technologies

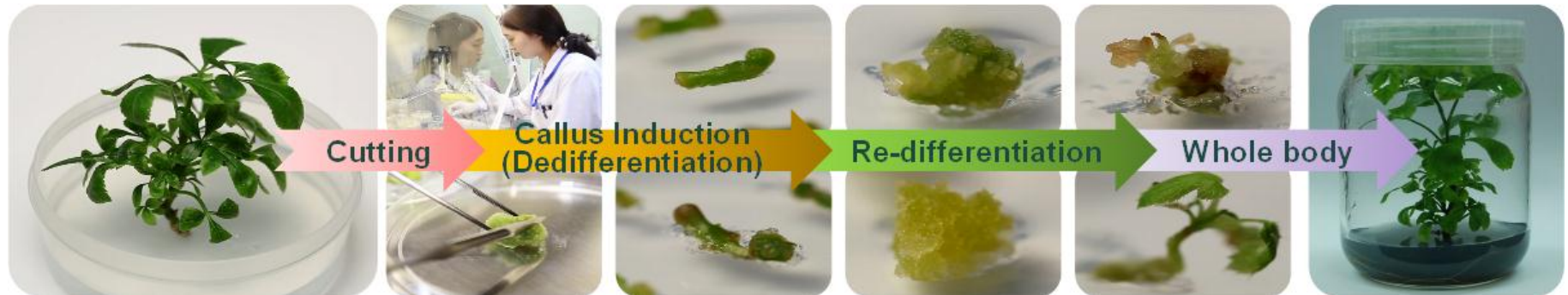
Advantages of Plant Cell Culture in Bioreactors

- Sustainable & Eco-friendly
- No variation due to environmental conditions
- Control on Phytochemical concentration
- Reproducible
- Enhanced biological safety
- Genetically modified organism (GMO) -free

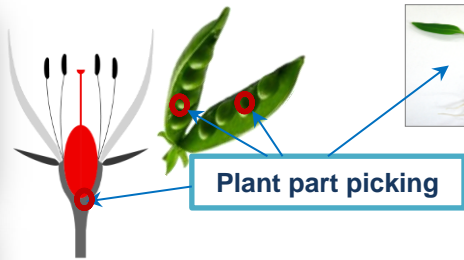


Plant callus

Plant callus is a mass of undifferentiated plant cells. Plant callus can be re-differentiated into the specialized tissues of a whole plant, with the addition of suitable growth regulators. This ability is known as “totipotency”. In this aspect the plant callus can be called as plant stem cell similar to human stem cell.

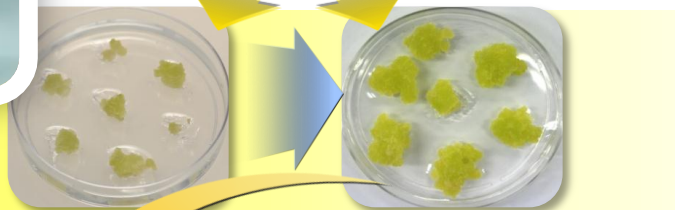
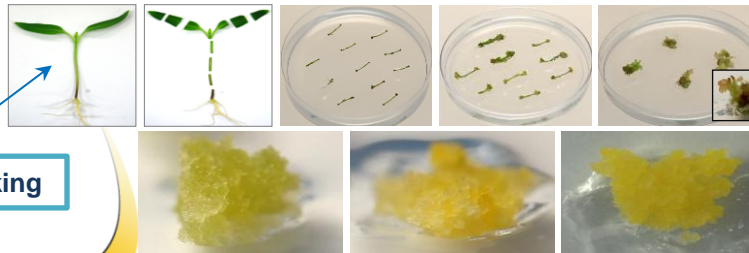


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Plant part picking

Callus Induction



2~3 Weeks



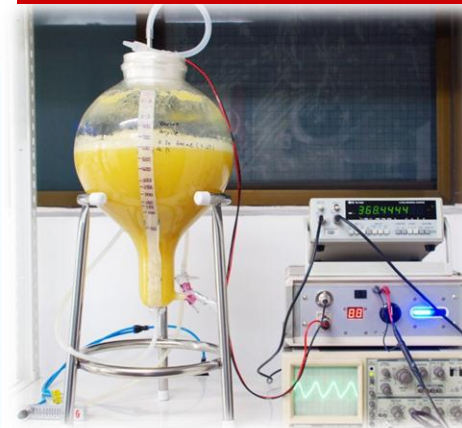
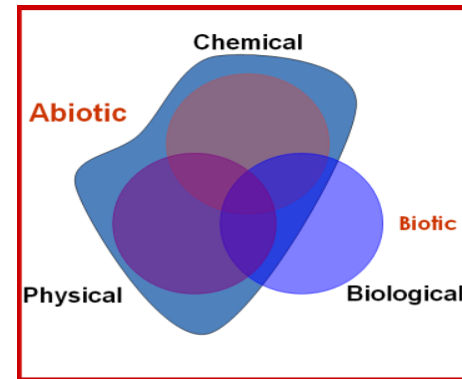
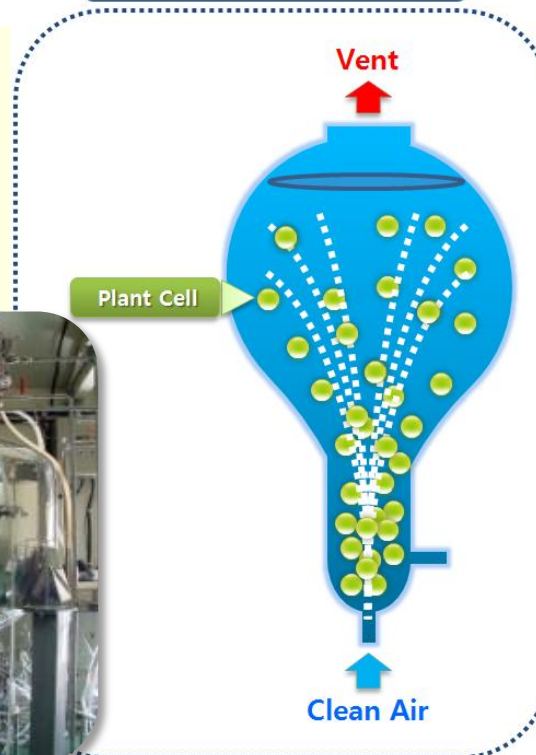
2~3 Weeks (as 20L Scale)



4~6 Weeks (as 1ton Scale)

Cultivation in the Bioreactor

Air Suspension Culture



**Test of Efficacy and Safety
of the finished products**

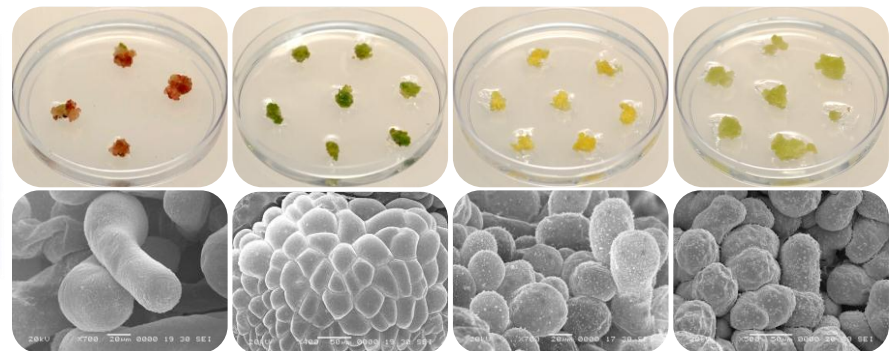
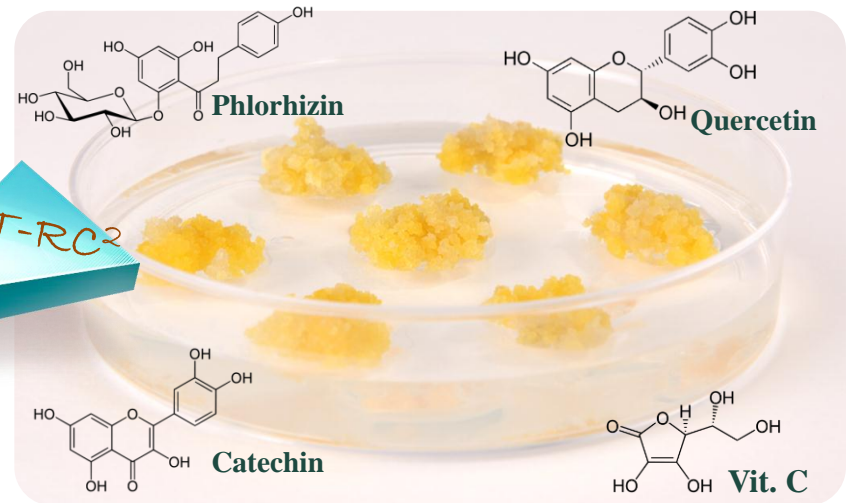
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Specialty of our plant cells

Our specialized techniques, TOP-C²X and SMART-RC², enables stimulation of production of phytochemicals from the plant cells.

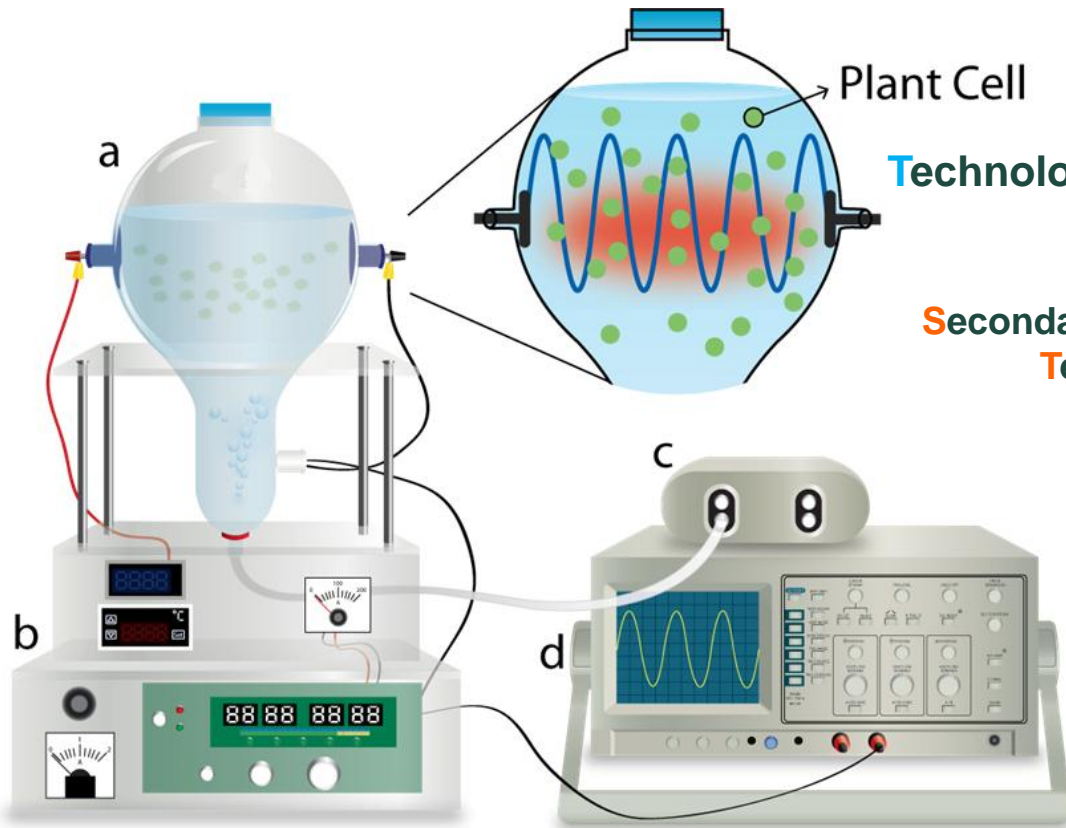
Plant cells
induced from
various part
of plant

TOP-C²X, SMART-RC²



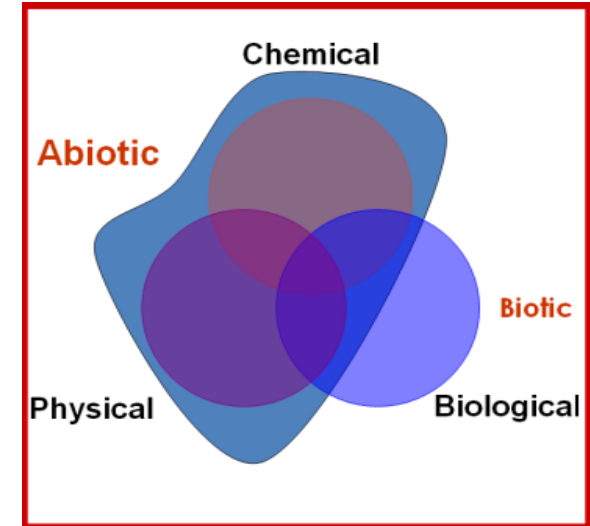
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What is TOP-C²X , SMART-RC²?



TOP-CX²
Technology of Plant – Cell Culture with Elicitor X

SMART-RC²
Secondary Metabolite Accumulated Radiofrequency
Technology Re-Controlled Cell Culture



Plant Cell Culture System by RF modulation

a: Bioreactor

b: Radiofrequency(RF) device

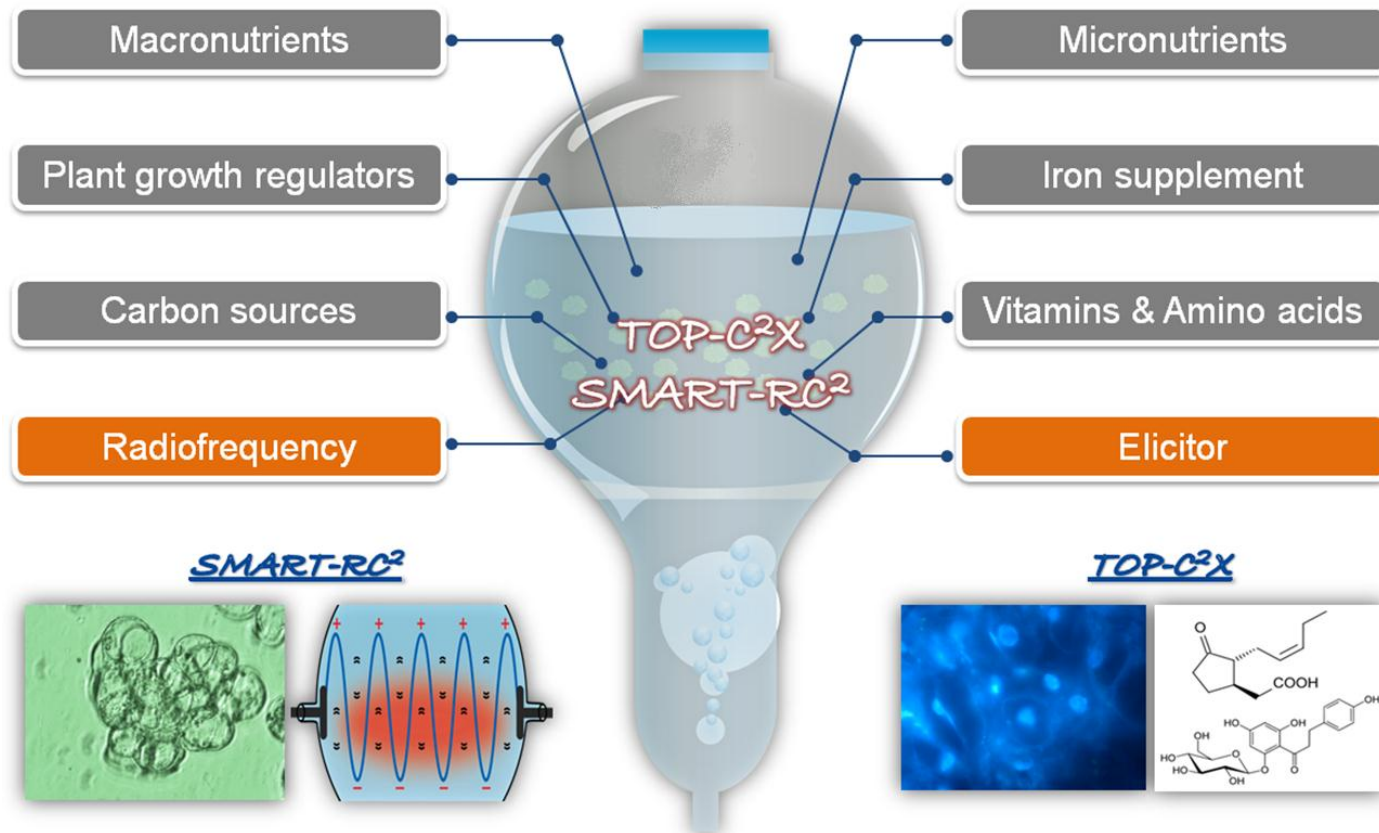
c: Air supplier

d: Oscilloscope

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Controlled plant cell growth in bioreactors

Targeted phytochemicals can be enhanced by TOP-C²X and SMART-RC² in plant cells.





Thank you!

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