

Seeking Solutions for Soybean Speed Breeding

A plant breeding and biotechnology company working on **innovative genetic solutions for agriculture** is seeking technical solutions to allow the **cultivation and crossing of soybeans within a 60-day lifecycle** (from sowing to seed harvest). The client is particularly interested in **growth regulators in combination with indoor cultivation protocols** to overcome flowering delay (long juvenile traits) and speed up the lifecycle in **tropical or subtropical soybean varieties**.



Approaches of interest

- **Growth regulators in combination with indoor breeding protocols (e.g. light systems) to allow a 60-day full lifecycle**
- The protocol must allow the obtention of viable seeds via selfing individual plants or the obtention of F1 seeds by artificial hybridization between soybean parental lines grown under the provided protocol/treatments
- Technical solutions related to **subtropical varieties with maturity groups 5 to 8.5**
- Protocols that have been validated in lower maturity groups (<5) but are applicable to soybeans with maturity groups 5 to 8.5
- Only **indoor cultivation** methods are within the scope of this call
- **Cost-effective lighting/climate systems**
- Growth regulators should be synthesised **cost-efficiently**, and should also be **sprayable** and **scalable**
- RNAi technologies to silence growth-affecting genes will be considered
- Solutions **validated within soybean** are preferred due to their specific photoperiod response
- Already commercially available or late-stage solutions known to allow an 80-90 day lifecycle in late maturity soybeans will also be considered

Developmental Stages of Interest

- The client is particularly interested in **commercially available** or **late-stage growth regulation solutions**
- Opportunities **TRL4+** are preferred but experimental **opportunities with proof-of-concept** are also of interest
- Opportunities earlier than proof-of-concept are out of scope for this call, unless they are built on strong foundations involving an already existing solution





Submission Information

Submission of one page, 200-300 word briefs are encouraged. Along with any optional supplementary information e.g. relevant publications and patents. In submitting to this campaign, you confirm that your submission contains only non-confidential information.

Opportunity for Collaboration

The client is open to a range of collaboration opportunities, with the most appropriate outcome being decided on a case-by-case basis. Example outcomes include licensing assets and research collaborations with scope for funding.

Opportunities sought

-  Technologies
-  Academics and expertise
-  Centres of excellence
-  Research projects
-  Spinout companies

Submissions

Please submit relevant, non-confidential opportunities online via: discover.in-part.com

Deadline: **20th June 2022 - 10:59 pm GMT**

Have any questions?

Contact our team at discover@in-part.co.uk