SMP TANDEM Taiwan – Updates

11 December 2024

Rick van de Zedde, Program Manager Autonomous Cultivation at WUR Priska Prasetya, Business Developer Plant Sciences Group at WUR Arnoud Bolten, Director at Polariks





Background – SMP TANDEM

- In Feb 2024, the WUR team acquired a seed funding for TAiwaN Dutch sEed Money (TANDEM) project from the Top Sector.
- Objective and focus areas: Identify collaboration opportunities with Taiwanese partners on the following topics:
 - 1. Crop physiology and modelling of horticulture crops in autonomous greenhouse
 - 2. Application of machine learning (AI) in autonomous greenhouse and robotic system
 - 3. Development of climate-resilient crops with automated digital phenotyping for targeted breeding



List of interested Dutch companies

No.	Organisations	Contact persons
1.	Polariks (SME)	Arnoud Bolten, Director
2.	Viscon	Suzane Pols, Team Lead of Plant Sciences
3.	Priva (Large company)	Marcel Koole, Senior Consultant Greenhouse Automation
4.	Saia Agrobotics (SME)	Ruud Barth, Director
5.	Sobolt (SME)	Jasper van der Auweraert, Lead AgriTech
6.	Hortikey (SME)	Andreas Hofland, General Manager
7.	Sigrow (SME)	Javier Lomas, Founder



Visit to Taiwan 8-12 April 2024 I

No.	Organisations	Contact persons
1.	College Bioresources & Agriculture of National Taiwan University	Yu-Pin Lin, Dean College Bioresources & Agriculture (CBA)
2.	Taiwan Agricultural research Institute (TARI)	Ting-En Dai, Head of the Department of Environmental Science Floriculture
3.	Department of Resources Sustainability	Lao-Dar Juang, Director
4.	Industrial Technology Research Institute (ITRI)	Clair Lee
5.	Agricultural Technology Research Institute (ATRI)	Kevin Tsai
6.	CH Biotech	Jane Huang, Director R&D
7.	Advantech	Esther Wu, Assistant Manager of Emerging Business Opportunity

Visit to Taiwan 8-12 April 2024 II

No.	Organisations	Contact persons	
8.	Hortitechs	Hortitechs Berry Lin, Manager	
9.	Symon	Justin Lee, Assistant of the Chairman	
10.	Norky	Wilson Lo, Vice President	
11.	iAmech Faith Su, Executive Assistant to GM		
12.	Jing-Pin Horticulture	Guo-Ming Chen, Manager	
13.	Sunsing Horticulture	Ming Chin Tseng, Manager	
14.	World Vegetable Centre	Roland Schafleitner, Flagship Program Leader	



Opportunities and actions I

1. Joint fundraising by National Taiwan University (NTU)-WUR on autonomous cultivation







記者楊惠琪 / 台北報導

生農學院提供)

因應氣候變遷對全球農業栽培與生產系統帶來衝擊,台大生物資源暨農學院與荷蘭瓦赫寧恩大學 (Wageningen University & Research, WUR) 共同簽署合作備忘錄,成立跨國聯合研究中心,將攜手發展優化設施栽培與生產智慧化的科技農業。



- NTU has an excellent digital twin in autonomous greenhouse developments incl. Robots. They are a strong partner in PPS proposals, if allowed.
- Currently, we are preparing a joint proposal.

Opportunities and actions II

2. Globalstars Taiwan with Advantech Taiwan, Polariks, and NTU



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Globalstars call for projects with Taiwan

FROM NOVEMBER 20, 2023 AT 01:00 NETHERLANDS TIME

TO MAY 21, 2024 AT 17:00 NETHERLANDS TIME THE CALL CLOSES ON 21 MAY 2024

The funding agencies in Taiwan (DoIT) and Austria (FFG), Canada (NRC IRAP), Finland (Business Finland), the Netherlands (RVO) and Sweden (Vinnova) are launching a Globalstars call for high technology projects and sustainability projects.

You can submit your R&D project application for this call for projects between 20 November 2023 and 21 May 2024. Your project consortium must include two organisations that are independent from each other, one (for profit) company from Taiwan and one (for profit) company from one of the participating Eureka countries or regions.





Advantech's interests:

- 'Smart agriculture' as an emerging business topic for them. What is the potential of IoT devices?
- Work with a Dutch company (Polariks) offering data-driven solutions and knowhow in agriculture domain.

Status: Not submitted, due to complex eligibility_ requirement.

Opportunities and actions III

3. Potential collaboration with **World Vegetable Centre (WorldVeg)**:

- Topics:
 - AI for phenotyping data analysis (bilateral)
 - Phenotyping infrastructure in Africa (EU).
 Submitted an EU-Africa proposal APPIA (rejected, seeking new opportunities).
 - Regenerative agriculture in Africa (IKEA Foundation)
- Ca. Sept 2026: The 9th International Plant Phenotyping Symposium in Africa (tbd) incl. WorldVeg etc.
- Research opportunities: Visiting scientists programme -Opportunities for WUR researchers to engage with WorldVeg.







Opportunities and actions IV

- 4. **Taiwan Agricultural Research Institute (TARI)**'s International Cooperation project:
 - WUR experts have been invited to Taiwan (May 2025),
 - Conference, workshops, and industry visits in Taiwan,
 - Greenhouse horticulture Summer School at WUR in 2025.



- Autonomous cultivation, integrating pests and diseases detection
- Interest in the PPS proposal for next year





Key learning points

- **Established connections**: e.g., WorldVeg, NTU, TARI, Viscon, Advantech.
- Topsector issue with international partners from Taiwan Advantech was interested to join, but we did not invite them because of new regulations against outside EU partners.
- **Eureka funding** (e.g., Globalstars call) is a complex one.
- Opportunities in Taiwan for autonomous cultivation, AI applications, and smart agriculture.



Opportunities after the SMP TANDEM

Organisations	Action points	Timeline
National Taiwan University (NTU)	Submission of joint proposal to Ministry of Agriculture Taiwan	Mar 2025
Advantech Europe	Visit and joint proposal with NTU	Feb-Mar 2025
World Vegetable Centre	African Plant phenotyping Network meeting in Morocco with WorldVeg	Apr 2025
Taiwan Agricultural Research Institute (TARI)	Visit by WUR's expert as part of their International Cooperation Project	May 2025
Viscon	Preparation and submission for PPS proposal	Sep 2025
More	Maintain contacts with Dutch and Taiwanese stakeholders and be aware of relevant opportunities	Ongoing



Thank you for your attention!

Explore www.wur.nl! Got questions? Reach out to us!

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