

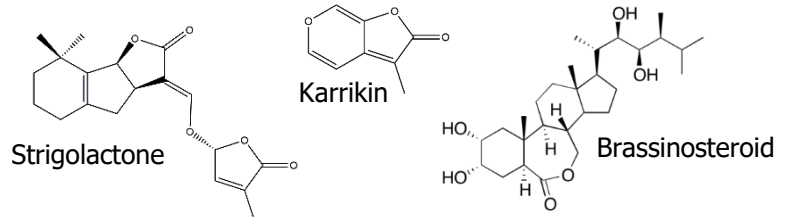


Horticultural Physiology Laboratory
 Under the direction of
Jutiporn Thussagunpanit, Ph.D. (Agricultural and Life Sciences)
 The University of Tokyo, Japan E-mail: jutiporn.thu@ku.th



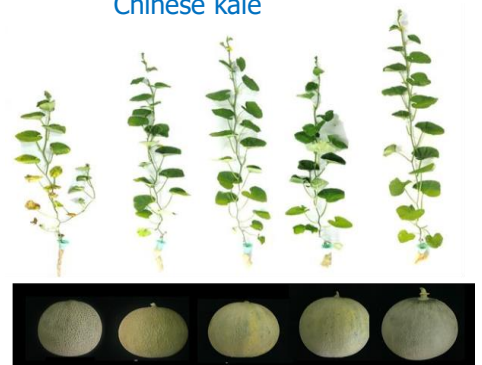
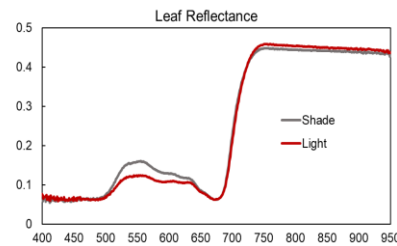
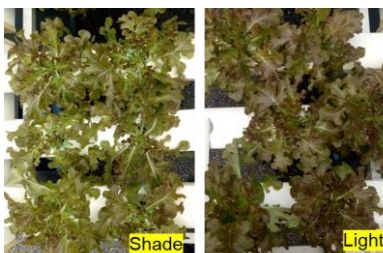
Research Areas

- ❑ **Physiology of vegetable crops**
- ❑ **Plant growth regulators**
 - **Brassinosteroids (BRs)**
 - **Strigolactones (SLs)**
 - **Others**
- ❑ **Stress monitoring by spectral indices**
- ❑ **Photosynthesis and chlorophyll fluorescence**



Monitoring of water stress by spectral indices in Chinese kale

Measurement of photosynthesis and chlorophyll fluorescence



BR concentration
 Brassinosteroid application in melon

Selected Publications

- **Jutiporn Thussagunpanit**, Panisra Nakklay, Kanokwan Sukkrom, Weerasin Sonjaroon: Leaf Light Reflectance for Evaluating Red Oak Lettuce Cultivated under Low Light Intensity. *Srinakharinwirot Science Journal* 2020; 36: 33–46.
- Weerasin Sonjaroon, **Jutiporn Thussagunpanit**, Supanun Ngennoy, Kanapol Jutamane, Ornusa Khamsuk: Influence of Light on Photosynthetic Efficiency of five Jackfruit cultivars. *Proceeding in the 13th Botanical Conference of Thailand*. 2019, Bangkok, Thailand.
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- **Jutiporn Thussagunpanit**, Kanapol Jutamane, Sureeporn Homvisasevongsa, Apichart Suksamrarn, Ayumi Yamagami, Takeshi Nakano, Tadao Asami: Characterization of Synthetic Ecdysteroid Analogues as Functional Mimics of Brassinosteroids in Plant Growth. *The Journal of Steroid Biochemistry and Molecular Biology* 2017; 172: 1–8.
- **Jutiporn Thussagunpanit**, Yuko Nagai, Miyu Nagae, Kiyoshi Mashiguchi, Nobutaka Mitsuda, Masaru Ohme-Takagi, Takeshi Nakano, Hidemitsu Nakamura, Tadao Asami: Involvement of STH7 in Light-adapted Development in *Arabidopsis thaliana* Promoted by Both Strigolactone and Karrikin. *Bioscience Biotechnology and Biochemistry* 2017; 81: 292–301.
- **Jutiporn Thussagunpanit**, Kanapol Jutamane, Lily Kaveeta, Witith Chai-arree, Porn Pankean, Sureeporn Homvisasevongsa, Apichart Suksamrarn: Comparative Effects of Brassinosteroid and Brassinosteroid Mimic on Improving Photosynthesis, Lipid Peroxidation, and Rice Seed Set under Heat Stress. *Journal of Plant Growth Regulation* 2015; 34(2): 320–331.



ห้องปฏิบัติการสรีรวิทยาของพืชสวน ภายใต้การดูแลโดย

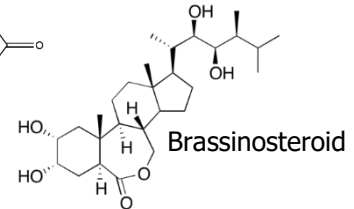
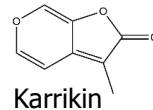
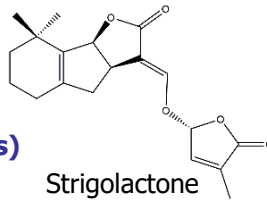
ดร. จุติภรณ์ ทัตสกุลพนิช (Agricultural and Life Sciences)

The University of Tokyo, Japan E-mail: jutiporn.thu@ku.th



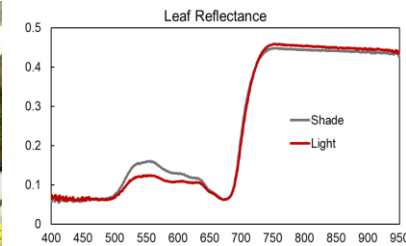
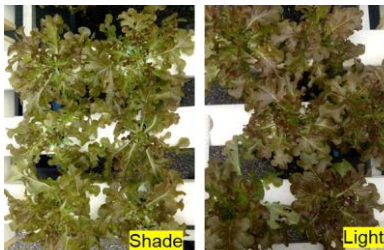
งานวิจัย

- ❑ สรีรวิทยาการผลิตผัก
- ❑ สารควบคุมการเจริญเติบโตของพืช
 - บราสซิโนสเตรอยด์ (Brassinosteroids, BRs)
 - สตริโกแลคโตน (Strigolactones, SLs)
 - อื่น ๆ
- ❑ การตรวจติดตามความเครียดในพืชด้วยดัชนีสเปกตรัม
- ❑ การสังเคราะห์ด้วยแสงและคลอโรฟิลล์ฟลูออเรสเซนซ์



การตรวจติดตามความเครียดจากการขาดน้ำด้วยดัชนีสเปกตรัมในคนำ

การวัดการสังเคราะห์ด้วยแสงและการเกิดคลอโรฟิลล์ฟลูออเรสเซนซ์



การใช้บราสซิโนสเตรอยด์ในเมล็ด
BR concentration

ผลงานตีพิมพ์

- **Jutiporn Thussagunpanit**, Panisra Nakklay, Kanokwan Sukkrom, Weerasin Sonjaroon: Leaf Light Reflectance for Evaluating Red Oak Lettuce Cultivated under Low Light Intensity. *Srinakharinwirot Science Journal* 2020; 36: 33–46.
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