

# Einladung zum Pflanzenwissenschaftlichen Kolloquium

**Freitag, den 18. Juli 2025, 12 c.t.**

Nussallee 9, Hörsaal X

**Referentin: PD Dr. Sophia Sonnewald**

*Dep. Biologie/LS Biochemie, Friedrich-Alexander-Universität  
Erlangen-Nürnberg*

**Thema:** „*Multifaceted approaches to understand and improve heat adaptation of potato plants*“

Potatoes (*Solanum tuberosum* L.) are a fundamental staple for millions of people and serve as feed and foodstock. Tuber formation starts from underground stolons with the Flowering Locus T homolog SP6A playing a key role. Global warming poses a significant constraint to potato production impacting tuber yield and quality. Therefore, we aim to better understand the underlying regulatory mechanisms of heat adaptations and to discover genes associated with stress tolerance and thereby contributing to develop stress-resilient potato varieties. Towards this goal, we performed genome-wide association studies (GWAS) and explored a crossing population to identify genomic regions associated with heat stress tolerance. To understand physiological and molecular changes varieties that differ in their heat response were compared and finally transgenic plants with altered expression of key-players such as SP6A are studied. The results of these different approaches will be presented and discussed.

**Diskussionsleitung:** Prof. Dr. Ute Vothknecht, IZMB – Zellbiologie der Pflanzen, Universität Bonn

Zu diesem Vortrag und zu einer evtl. Nachsitzung sind Sie herzlich eingeladen