GATERSLEBEN LECTURE

IPK LEIBNIZ-INSTITUT

Speaker: **Prof. Dr. Jane Langdale**
Department of Biology,
University of Oxford, UK

Title: **Regulation of cell patterning in grass leaves: understanding maize with a view to engineering rice**

Time: **Tuesday, April 22, 2025, 2 pm**
https://ipk-gatersleben-de.zoom-x.de/j/65184972012?pwd=FZD8F8iZFa9MGLCaWH9ZZFN1WKsPjz.1
Meeting-ID: 651 8497 2012
Kenncode: 500312

Place: **IPK Lecture Hall,**
Corrensstr. 3, 06466 Seeland OT Gatersleben

Abstract:
All grasses exhibit a characteristic strap shaped leaf blade but this consistent external morphology masks an underlying anatomical difference that distinguishes species that carry out C4 versus C3 photosynthesis. A multi-national effort aimed at introducing components of C4 photosynthesis into the C3 plant rice requires an understanding of the genetic regulation of C4 leaf development, so that leaf anatomy can be manipulated in rice. I will provide an overview of our current understanding of C4 leaf development, discuss recent research aimed at identifying genetic regulators of leaf anatomy, and illustrate how this research fits into the wider 'C4 Rice Project'.

Short BIO
Jane Langdale is currently Professor of Plant Development in the Biology Department at the University of Oxford and Professorial Fellow at The Queen's College.

Jane's research focusses on understanding the genetic mechanisms that underpin how leaves develop and how they evolved (www.langdalelab.com) and she is currently co-ordinator of the Bill & Melinda Gates Foundation funded 'C4 Rice Project' (www.c4rice.com).

Prof. Dr. Nils Stein (Organizer and host)