

# WEBINAR NOTICE

## Agriculture Seminar Series

### Canadian Light Source Inc.

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**SPEAKER:** Prof. Dr. Tim Sharbel, Department of Plant Sciences, University of Saskatchewan

**TOPIC:** Virgin birth, a key technology to revolutionize agriculture

**DATE:** Wednesday, November 18, 2020

**TIME:** 2:00 PM

**WEBEX:** Meeting number (access code): 146 242 6624  
Meeting password: eGVQfGdZ575

#### ABSTRACT:

An organism's choice to reproduce with or without sex has long puzzled evolutionary biologists. Apomixis, a natural form of reproduction in plants whereby seeds are produced asexually, has evolved repeatedly from sexual ancestors in many species. Apomixis is of interest on a number of levels, ranging from population genetics to evolution, but also from an applied perspective as it represents a disruptive technology which could significantly change agricultural practices. For example, if apomixis were induced in crops, it would enable the permanent fixation of any heterozygous genotype, regardless of its genomic heredity and phenotypic complexity, in a single generation. The impact on breeding programs would be enormous, as the fixation of traits demonstrating heterosis in a single generation would permit the rapid development of superior crop varieties adapted to changing environmental conditions, diverse farming niches and systems, and evolving markets, as their present resource investment into the generation and maintenance of inbred lines could instead be redirected to the development of a more diverse germplasm.



#### HOSTED BY:

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