

## WHAT'S NEW IN PLANT PHYSIOLOGY?

Flavour of walnut is due to..?



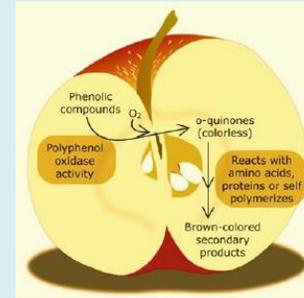
"Three factors responsible for unique flavour of walnut are oil content, a tendency to become rancid if not stored properly, and the tannins in the walnut peel."

Prey-driven movements in *Nepenthes*....



Enzymes inside the pitcher:  
Proteases, Esterases, Phosphatases,  
Ribonucleases, Chitinases

Why do cut apples turn brown..?



"Conversion of phenolic compounds into brown-colored secondary products in the presence of oxygen, causes browning of cut region."

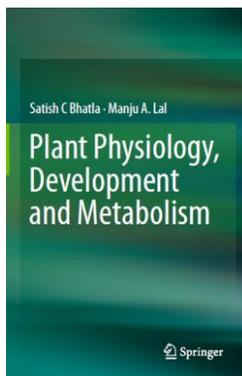
**Want to read more about such interesting facts?**

Explore the latest book

### "PLANT PHYSIOLOGY, DEVELOPMENT AND METABOLISM"

**Authors: Prof. Satish C. Bhatla and Dr. Manju A. Lal** from Springer Nature Singapore 2018

(Printed book ISBN: 978-981-13-2022-4; ebook ISBN: 978-981-13-2023-1)



This book focuses on the fundamentals of plant physiology for undergraduate and graduate students. It is a highly illustrated book with 707 illustrations, 105 tables and 87 box items covered in 34 chapters. The book has been divided into five major units. **Unit I** discusses the unique mechanisms of water and ion transport, while **Unit II** describes the various metabolic events essential for plant development. Light perception and transduction works in perfect coordination with a wide variety of plant growth regulators in regulating various plant developmental processes, and these aspects are explored in **Unit III**. **Unit IV** investigates plants' various structural and biochemical adaptive mechanisms in plants. **Unit V** addresses the large number of secondary metabolites produced by plants.

#### About the authors:



**PROFESSOR SATISH C BHATLA** is serving in the Department of Botany, University of Delhi, since 1985. He undertook post-doctoral training as a Fellow of Alexander von Humboldt Foundation (Germany) in Heidelberg, Freiburg and Berlin. He has supervised 23 Ph.Ds. so far and had international collaborations with universities in Germany, Belarus and Israel. Prof. Bhatla is a member of Steering Committee of International Society of Plant Signaling and Behavior and is an Associate Editor of its journal. He has more than 99 international research publications to his credit.



**Dr. MANJU A. LAL** obtained her Ph.D. in plant physiology from Indian Agricultural Research Institute at New Delhi in 1976. She has taught plant physiology to undergraduate students for more than four decades. She superannuated in December 2017 as Associate Professor from the Department of Botany, Kirori Mal College, University of Delhi.

**Review:** This is an excellent book on plant physiology, development and metabolism, covering all the relevant aspects in 5 major parts and 34 chapters. Each topic is nicely supported by photos, illustrations, schemes, tables and information boxes. At the end of the book, useful glossary of important terms in plant physiology is provided. The book will guide experts in investigations on these skills of plant physiology and development. It will be useful to the students, teachers and researchers, both in universities and research institutes, especially in relation to biological and agricultural sciences. Students and teachers will profit also from multiple-choice questions at the end of each chapter.



**PROF. FRANTISEK BALUSKA**  
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