

- carbohydrates in *Arabidopsis thaliana* L. (Heynh.) cv. Columbia during rapid cold acclimation. - *Protoplasma* **172**: 111-123, 1993.
- Rohde, P., Hinch, D.K., Heyer, A.G.: Heterosis in the freezing tolerance of crosses between two *Arabidopsis thaliana* accessions (Columbia-0 and C24) that show differences in non-acclimated and acclimated freezing tolerance. - *Plant J.* **38**: 790-799, 2004.
- Shen, W., Kazuyoshi, N., Tachibana, S.: Involvement of polyamines in the chilling tolerance of cucumber cultivars. - *Plant Physiol.* **124**: 431-439, 2000.
- Strand, A., Hurry, V., Gustafsson, P., Gardeström, P.: Development of *Arabidopsis thaliana* leaves at low temperatures releases the suppression of photosynthesis and photosynthetic gene expression despite the accumulation of soluble carbohydrates. - *Plant J.* **12**: 605-614, 1997.
- Strand, A., Foyer, C.H., Gustafsson, P., Gardeström, P., Hurry, V.: Altering flux through the sucrose biosynthesis pathway in transgenic *Arabidopsis thaliana* modifies photosynthetic acclimation at low temperatures and the development of freezing tolerance. - *Plant Cell Environ.* **26**: 523-536, 2003.
- Thomashow, M.F.: Plant cold acclimation: Freezing tolerance genes and regulatory mechanisms. - *Annu. Rev. Plant Physiol. Plant mol. Biol.* **50**: 571-599, 1999.
- Uemura, M., Warren, G., Steponkus, P.L.: Freezing sensitivity in the *sfr4* mutant of *Arabidopsis* is due to low sugar content and is manifested by loss of osmotic responsiveness. - *Plant Physiol.* **131**: 1800-1807, 2003.
- Wanner, L., Junttila, O.: Cold-induced freezing tolerance in *Arabidopsis*. - *Plant Physiol.* **120**: 391-400, 1999.
- Xin, Z., Browse, J.: *eskimo1* mutants of *Arabidopsis* are constitutively freezing-tolerant. - *Proc. nat. Acad. Sci. USA* **95**: 7799-7804, 1998.
- Yano, R., Nakamura, M., Yoneyama, T., Nishida, I.: Starch-related  $\alpha$ -glucan/water dikinase is involved in the cold-induced development of freezing tolerance in *Arabidopsis*. - *Plant Physiol.* **138**: 837-846, 2005.
- Zhang, D.Z., Wang, P.H., Zhao, H.X.: [Determination of the content of free proline in wheat leaves.] - *Plant Physiol. Commun.* **16**: 62-65, 1990. [In Chinese.]
- Zhang, Z.Q.: [Determination of the soluble sugars in plant materials.] - In: [Experimental Handbook for Plant Physiology.] Pp. 134-138. Shanghai Science and Technology Press, Shanghai 1985. [In Chinese.]

Rieger, M.: **Introduction to Fruit Crops.** - Food Products Press, an Imprint of the Haworth Press, Inc., New York - London - Oxford 2006. 462 pp. Softbound USD 69.95. ISBN 1-56022-259-0.

The term fruit crop is defined by the author as "a perennial, edible crop where the economic product is the true botanical fruit or is derived therefrom". This eliminates annuals, such as tomato and melons and includes atypical fruit crops, such as coffee, cocoa, oil palm and coconut, because of edible parts of true botanical fruit. Fruit crops under this definition cover worldwide over 40 million hectares and add tens of billions of USD per year to the global economy.

The present volume provides in encyclopedic form extensive review of tropical, subtropical, as well as temperate fruits. Descriptions of the crops follow an uniform outline covering taxonomy, origin and history of cultivation, folklore, medical properties and nonfood usage, world production, botanical description, aspects of general culture, harvest and postharvest handling, contribution to diet and bibliography. The introductory chapter deals with the general concepts and terminology related to each section of the outline. Fruit species are

reviewed in alphabetical order in 29 chapters including almond, apple, apricot, banana and plantain, blackberry and raspberry, blueberry, cacao, cashew, cherry, citrus fruits, coconut, coffee, cranberry, date, grape, hazelnut or filbert, macadamia, mango, oil palm, olive, papaya, peach, pecan, pineapple, pistachio, plum, strawberry, walnut. The text is accompanied with a number of useful tables and figures and includes 30 first-rate color plates.

The book is written clearly and concisely, covers an enormous amount of material and requires only basic knowledge of plant biology and horticulture. Special technical terms are explained in the glossary at the end of the book. This together with a list of common and scientific names of fruit crops, conversion factors of units and a subject index enhance the value of the book. This unique text and reference source will certainly be of great interest to a wide horticultural audience, especially to students, teachers and commercial fruit growers.

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