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Front cover illustration: Picture 1 (left): Homology model of α -amylase from *V. radiata*. (a) Overall view showing the conserved active site residues, (b) comparison with the structure of AMY 1 at the starch granule binding site (AMY 1, Trp²⁷⁸ and Trp²⁷⁹; VrAmy, Val²⁷⁷ and Lys²⁷⁸) and (c) sugar tongs binding site (AMY 1, Tyr³⁸⁰; VrAmy, Met³⁷⁹). Tripathi, P., Lo Leggio, L., Mansfeld, J., Ulbrich-Hofmann, R., Kayastha, A.M., 2007. α -Amylase from mung beans (*Vigna radiata*)—Correlation of biochemical properties and tertiary structure by homology modelling. *Phytochemistry* 68, 1623–1631. Picture 2 (middle): Hypersensitive resistance reaction of a wheat cell penetrated by a haustorium of the wheat stem rust fungus, *Puccinia graminis* f. sp. *tritici*. Stem rust is one of the most dangerous and potentially devastating pathogens of wheat, and a renewed threat to global wheat production since the appearance of the new race UG99 in Uganda that has broken the widely used Sr31-based resistance of wheat to this pathogen. Menden, B., Kohlhoff, M., Moerschbacher, B.M., 2007. Wheat cells accumulate a syringyl-rich lignin during the hypersensitive resistance response. *Phytochemistry* 68, 513–520. Picture 3 (right): The photograph shows the flower of the so-called Japanese roof iris, *Iris tectorum* Maxim (Iridaceae), first observed growing on roofs in Asia by Carl Maximovic (1827–1891). Its Chinese name is *Lan hu die* (blue butterfly) and the root is used in Chinese Traditional Medicine for the treatment of certain cancers. It contains iridal-type triterpenes—two biologically active iritectorols (A and B) were reported in 2007. Fang, R., Houghton, P.J., Luo, C., Hylands, P.J., 2008. Isolation and structure determination of triterpenes from *Iris tectorum*.