

Vodrážka, Z.: **Biochemie [Biochemistry]**. Volume 3. - Academia, Praha 1993. 192 pp., in Czech.

This expected third volume of biochemistry textbook consists of large amount of topics, divided into five chapters. The first one deals with genetics from gene discovery to genetic engineering, everything in 53 pages. That means that only basic and superficial knowledge is presented on each subject. This chapter briefly describes also the regulatory mechanism of protein synthesis on distinct levels. The text is continuation of chapter 2.7 in 1<sup>st</sup> volume, where most of necessary formulas are presented. It reduces comprehensibility, that the whole topic is divided into two separated volumes. Second chapter deals with many aspects of plants, beginning with photosynthesis, nitrogen and sulphur assimilation through secondary plant metabolites up to plant biotechnology and practical significance of plants, in only less than 30 pages. From this range it is clear that description of plant metabolism possesses the similar characteristics as previous chapter. Chloroplasts most probably do not originate from mitochondria. Third chapter discusses microorganisms and can be mostly regarded as microbiology. It comprises classifying of microorganisms, their cultivation, significance and industrial utilization. Fourth, very short part is called biochemistry of xenobiotics, with special emphasis on their presence in food as additives and preservatives for improving the appearance, taste, and smell. The outline of fate of xenobiotics in organism and their metabolic pathway are included. This chapter has descriptive form with several large tables. The last chapter deals with so called applied biochemistry, starting with biotechnology and ending with biochemistry of environment. The part of food biochemistry stresses the main and important food components as vitamins, carbohydrates, lipids and proteins. Almost whole chapter consists of only plain text with limited amount of formulas. All parts of this book are mainly descriptive without sufficient number of objective pictures and force students to learn by heart. All terms are presented only in Czech, some of them probably constructed by author, and it would be useful to mention also English counterparts, as majority of biochemical literature is written in this language. Some expressions are not exact or correct and abandoned or obsolete terms are used. This textbook has limited destination for only technical university students and biochemists engaged in industry.

N. WILHELMOVÁ (*Praha*)