Least-cost feed formulation requires the search for low-cost feedstuffs. However, the feed value of plant-originating feedstuffs, and therefore their maximum dietary inclusion, might be dependent on the presence of secondary compounds which could exert anti-nutritive effects in farm animals under certain circumstances. This traditional view is contrasted with possible beneficial effects of such secondary plant products on animal health and performance in this book.

The book contains a total of nine chapters contributed by animal nutritionists and plant breeders from the UK.

At first, a structured introduction into anti-nutritive factors in higher plants is given in an overview, which is a useful starting point for those interested in particular secondary plant compounds. From the many secondary plant products mentioned in the overview, only three are dealt with in the subsequent chapters, namely tannins, protease inhibitors and plant lectins. Despite this limitation, these three compounds are of great importance in practical feeding.

Tannins are introduced with a review covering the occurrence of tannins, their definition and analysis, their role within plants, and general tannin effects in animal nutrition. This introduction is followed by two papers dealing with tannin effects in ruminant- and non-ruminant nutrition. The balance between anti-nutritive and beneficial effects of tannins is clearly demonstrated and discussed for ruminants, and plant feedstuffs with higher tannin concentrations are discussed as alternative feed materials for non-ruminants.

The paper dealing with protease inhibitors is logically structured in such a way that an understanding of their biological effects is facilitated for the reader. Assay methods are first summarized, and then in vitro properties, survival in vivo, short- and long-term effects are discussed. The review is completed with a comparison of species-related differences in the response to protease inhibitors. Finally, an illustration of the mode of action of protease inhibitors contributes to an overall understanding of the biological effects protease inhibitors.

The role of lectins in animal nutrition is reviewed in another chapter. Their role in plants is described, followed by methods of analysis. The paragraphs comparing stability of lectins in vitro to their survival in vivo, along with other in vitro properties are very helpful for an understanding of the biological effects of lectins in vivo. Discussion of the...
systemic effects and of mode of action complete this contribution. The paper focuses mainly on kidney bean (*Phaseolus vulgaris*) lectins (PHA), on soybean agglutinin (SBA) and on Jackbean agglutinin (ConA), but other lectins are also considered for comparison.

The book ends with the perspective of plant breeders on the problems of secondary plant products. The role of such compounds in plants is highlighted and the balance between plant breeding for reduction of a particular secondary plant compound and maintenance of the plant yield potential is discussed. In particular, this final aspect helps the animal nutritionist to understand what can be done and what would be useful to do. On the other hand, the chapters dealing with the problems of animal nutritionists should show the plant breeder what is worth considering in his or her work.

The book contains an index which helps in a quick reference.

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