Preface

It is a real pleasure to write a few words to introduce this book. Even if you are not an agronomist, you are bound to feel more knowledgeable after reading this guide. Its originality lies in its not being a long list of recipes. I think the authors' intention is to make everyone aware that oil palm nutrition is a science, and to set up a fruitful dialogue between plantation agronomists and managers, and scientists.

As a breeder, the interaction between plant material and nutrition is one of my constant concerns. Variation in the mineral signature of the leaflets of different varieties is a fact, and agronomists will have to pay more attention to changes in mineral contents (leaflet, rachis), rather than just to a "critical level". The authors do not forget that managing soil fertility also means managing the determinants of soil structure, such as organic matter content, or the soil exchange capacity, which are factors that go hand-in-hand with mineral nutrition. Of course, the reader will gain a better understanding of positive or negative interactions, or competition for uptake between minerals. However, things remain complex and oil palm nutrition specialists will continue to be of great help.

The current commodity price crisis, which follows on from the one in 2011/12, and will be followed by others, challenges us on nutritional efficiency. One of the first keys is how plant nutrition is managed. Numerous publications have shown that nutrition methods based on the "reimbursement" of stocks, exports and leaching of minerals generally lead to an overestimation of real needs. The method presented here is based on long-term experiments and helps to determine actual needs. Such an experimental network should accompany any oil palm nutrition policy. It should not be seen as a constraint but as an opportunity to manage oil palm nutrition in a sustainable and efficient way based on scientific facts.

Another challenge is to define an economic optimum. Fertiliser prices vary, storms are followed by calmer periods, but the trend is towards higher nutrition costs because world stocks are sometimes limited, or prices are strongly linked to energy. Moreover, oil palm responds to fertilisers over the long term: today's nutrition will have an impact on yields in the years to come. There is true know-how to be developed to mitigate costs and adopt long-term nutrition policies that are in line with long-term economic trends.

The approach described here might seem to be reserved exclusively for large plantation companies. In fact, it seems quite possible to make general recommendations for smallholders based on fairly large agronomic units (soils, general environmental conditions) that can be implemented by State Agricultural Development Services.

I should like to sincerely thank the authors for their efforts to sum up decades of experiments and analyses in a short, easy-to-read book that provides an understanding of the underlying evidence-based decision-making approach to managing oil palm nutrition.

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