

Editorial

Crop diversity and agricultural expertise

A few years ago, I attended a Malaysian symposium on plant breeding, and presented a paper on one of my interests—the breeding of ornamental cannas. Ornamental cannas are colourful, easy to grow, and for breeders, have the advantage of rapid development—from seed germination to flowering in just four months. There were some 200 people in the audience, including hopeful young scientists. Except for me, all the others seemed interested only in the breeding of oil palm. The idea had taken root that the only plant worth working on is oil palm and to be expert in breeding oil palm one must concentrate exclusively on oil palm.

In the present issue of this journal, we learn that the cassava industry in Malaysia has collapsed. The same has happened to other agricultural activities in which Malaysia used to have a major global presence—rubber, cocoa, coconut, pineapple. Our papaya and banana production efforts are also shrinking. What next? Whole cropping systems are disappearing without a whimper, and with it goes a lot of expertise at various levels, from manual skills, as in the grafting and tapping of rubber, to scientific expertise in pest and disease control, crop physiology, ecology and so on. Every land owner, faced with a choice of what to grow, seems to opt for oil palm because it is more profitable than any other crop.

With oil palm riding high, it is easy to think that the future is assured and other crops do not matter. But there are many factors that are not predictable. Global warming and changes in the environment may bring unforeseen problems such as extended periods of dry weather alternating with floods, and new forms of pests and diseases. Labour for the heavy task of harvesting oil palm may become expensive or even unobtainable. Such uncertainties make it risky to be totally focused on a single crop and to allow agricultural expertise to shrink.

The big players in the oil palm industry could make agriculture more secure by helping to develop other crops and even to protect the remaining forests. United Plantations, an oil palm giant, made a big impact on the banana industry at one time with a minor diversion into bananas (see this journal, Vol. 1, No. 1). By doing research on bananas independently of everybody else, and selling improved planting materials to banana growers, it created goodwill for United Plantations within the general agricultural community and helped to support the development of expertise in another crop totally different from oil palm.

Every crop requires new ideas for research and development, and good ideas are the result of many ideas being pursued independently. Among the many crops that may have a bright future is cassava (tapioca). It provides the raw material for many products, and above all, of bio-degradable plastics to replace the everlasting plastics that are so alien and harmful to the environment.

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