

Exotic new fruit- commercial opportunities- Explanation by Professor Yosef Mizrahi

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The idea

There are thousands of wild and rare plant species with immense potential as a source of profits, growing in different parts of the globe. The scientific community simply ignores them. There are two main reasons for this neglect: Most of the money for plant research comes from growers of well-established crops and is doled out in proportion to sales: the greater the volume of production, the more money is available for further research. Hence "doing more of the same" is the name of the plant research game, with marginal improvements resulting. A high percentage of the scientific work of plant research is carried out on model plants that are easy to work with. *Arabidopsis thaliana*, for instance, can run to 12 generations per year and can be grown in a small box in the corner of any lab. Today it is the most researched plant in the world. We are convinced that these new exotic crops could generate much higher profits than the common crops, which today are perched on the edge of profitability. This is so in spite of the complications attending the introduction of a new product into the market.

In 1984 Dr. Nerd and I initiated a project the aim of which was to explore the potential of wild and rare exotic fruit trees, many of them used by indigenous people for thousands of years. We propose several ways of utilizing the know-how that we have accumulated in all these R&D years:

1. Fresh fruit- We have explored the potential for growing, picking, packing and shipping new exotics for the fresh fruit they produce, to revive the agricultural export industry. Four of these new species are already being sold in Israel and Europe as new fresh fruits. Eight more species have the same or even greater potential and are just waiting for commercial firms to utilize them.

We developed the agro-technology and many selections and hybrids for several species. Some of them can be seen in our Vine cacti Genes bank section of my homepage.

2. New food products- Exotic new food products can be manufactured from these new fruits. Around fifteen products could also be produced, and the only impediment is the proper investor who will be ready take the risk of dealing with totally new product.
3. Bioactive compounds- Bioactive compounds can be identified and extracted from the new exotic species, then utilized with or without purification to varying degrees. Few examples are already in use and may more waiting for further development.

Few examples of food products and their pictures are as follows:

Marula is a wild fruit of Africa which we domesticated. Fruit juice was proven to reduce Cholesterol in healthy humans and reduce triglycerides in their blood. This juice has higher antioxidant activity than pomegranate. I suggest producing marula juice and coloring it with the natural pigment of the glowing magenta color from the pulp of the pitaya which we domesticated. The product has a unique beautiful appearance and excellent taste and healthy nutraceuticals.

Monkey Orange is a wild fruit which we domesticated and very recently an excellent sorbet was prepared from it. This sorbet maintains the pulp quality which is a taste of orange, banana and apricot and a smell of a clove.

I'll be more than happy to cooperate with any commercial firm which will be ready to apply our know-how.

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