

CHAPTER 2

WHERE IN THE WORLD...?

I have been growing Begonias for the better part of 35 years and during all that time I have puzzled over the questions of where they came from and how old they are. I have been amazed at the diversity of places which they call home, mostly in the tropic and sub-tropic regions of the world, including Africa, South and Central America, India, Southern China and southwards through Vietnam, Malaysia, the many islands which comprise Indonesia, to the Philippines and Papua New Guinea, but not, you will note, in the Island Continent of Australia. A few species have even penetrated as far north as Taiwan.

I noticed that many of these places had once been part of the Super Continent of Gondwana and others were today in contact with such places, and I fancied that Begonias were very, very old and had their beginnings there? How else, I reasoned, could they have reached their present habitats unless at one time they had had land contact one with another? How fools rush into the world of science that have no scientific training!

The answers to my questions were forthcoming when, at a recent Begonia Convention in Sydney, Australia, we were fortunate enough to be addressed by Dr Mark C. Tebbitt, professor of Botany at California University of Pennsylvania. He specialises in the systematics of Begonia and along with other scientists had investigated the very areas in which I had for so long been speculating. How very different are the facts from my wild theories!

Research has revealed that Begonias originated in Africa 50 to 64 million years ago, some time after the super continent of Gondwana began to break up. The problem of determining the age of the genus was made most difficult for the reason that no fossils have as yet been discovered of this family; perhaps, I reason, because begonias, being succulent by nature, would not readily fossilise. So another method of determining age had to be resorted to. Fossils of related families, including *Datisca* and *Cucumber* were used to provide rough dates when all these families were alive. Use of DNA sequencing then produced the answer, which it must be pointed out, is a minimum age. Subsequent molecular analyses determined that Begonia originated in Africa and from there spread gradually both westwards into the South and Central Americas and to the east through India to Asia and the lands and islands to the south east. Dating of present day species supports this determination, with those from Papua New Guinea being the most recent at a relatively young 2 million years old. I surmise that they spread through Central and South America in a similar gradual fashion.