



## INTRODUCTION (Edition 2014)

An update of the status of Lebanese flora has become indispensable. In fact, since the laborious field trips of Mouterde between 1931 and 1964, and his valuable research work, no other publication has been undertaken on such a large scale as his *Nouvelle flore du Liban et de la Syrie* (which appeared on sale successively in 1966, 1970 and 1983). The author described 2606 species from Lebanon. Several Lebanese botanical researchers prepared later theses of high scientific value, while others photographed beautiful wild flowers in their natural environment, but since 1964 nobody has revised the general status of Lebanese flora, and especially after the Lebanese wars between 1975 and 1992.

Since 2001, we have published 5 notes on Lebanese flora. In those notes, we give lists and brief descriptions of 49 wild plants not previously observed in Lebanon. Some have escaped from cultivation; others are found in Syria or reported in neighboring countries. Yet others, which had been declared as extinct, have been found again in Lebanon.

The total number of plants described in this book is 2597. Over the past twelve years, we personally have collected and identified 2479 species, sub-species and varieties of Lebanese wild plants, which we have photographed. We still need to find 118 species (*Poaceae*, *Caryophyllaceae*, *Brassicaceae*, *Fabaceae*, *Asteraceae*...). Photographs of several plants were taken 40 years ago and those plants have not been observed since that time in Lebanon: are they now extinct? We have scanned the photographs and reproduce them here.

The extinction of some plants is due to the destruction of their habitat. Forest fires, excessive tree cutting, the draining of marshland, rivers or land, the transformation of agricultural land on the coast into land for housing, and, since 1993, excessive urban development, together with tourist development all along the coast, have altered the very nature of the land. Sports centres in the high mountains and uncontrolled grazing are other factors that have contributed, according to recent research, to the loss of 93 species of wild plants, of which 13 were endemic. As an example of a plant that has recently become extinct, we mention the *Retama raetam*, whose bushes used to brighten up the coastal sands of south Beirut and which has not been seen since 1986. The total number of Lebanese plants (trees, ferns included) is, according to our calculations, 2597 species, 757 genera, and 124 families. Each family is succinctly described. Families with a large number of species are divided into small groups to facilitate their identification.

We wish to acknowledge the assistance of our friend Nasser Shreif, who pointed out to us some rare species and who has accompanied us several times to share our love of nature. We thank also Dr Khodr Addam who pointed out to us some special species.

A big thank you to Dr Edouard Makhoul. His contribution was of great help. He accompanied us during 2 years and helped with our field research. He generously gave us some pictures to use.

We are also very grateful to the National Council for Scientific Research which facilitated our work.

Our warmest thanks go to the *Services culturels de l'Ambassade de France* in Beirut. They helped to make our visits to the *Museum National d'Histoire Naturelle de Paris* possible, where we were able to consult the rich collections of its Herbarium. We want to thank our colleagues at the Museum for their valuable support and their kind assistance, especially Dr Thierry Deroin who so kindly received us on several occasions. We will never forget his invaluable, friendly assistance. Such visits gave us the opportunity to complete our work of identification and helped us to photograph 47 species, especially among the *Poaceae*.

We wish to thank especially Mrs. Jean Eileen Abou-Chacra for her kind and invaluable assistance.

Georges & Henriette Tohmé