hausen's application of leaf-nervation as a means of identifying fossil leaves, since the course of the leading bundles sometimes showed the greatest variability within smaller and larger groups, sometimes on the contrary showed scarcely any differences. The shapes of the leaves could, in his opinion, at the most be used only as a specific feature of distinction. To these inherent difficulties in systematic botany was added the fact that in the case of the fossil types it was quite exceptional to find leaves, flowers, and fruits embedded in the same localities in such a way as to demonstrate their original association with one another; and the want of caution displayed by many inquirers had created a mass of palæophytological literature which for scientific purposes was little more than useless ballast to be discarded.

Schenk fearlessly and patiently carried out the task of sifting the valuable results from the worthless, and by his precise and comprehensive knowledge of living forms he brought the scattered information regarding extinct forms into line with the most recent aspects of botanical science; his classificatory treatment of fossil floras is now adopted by the best authorities.

Schenk was a warm supporter of Darwin's theory of descent. His remarks on the genealogical relationships of the different fossil groups of plants and the modifications and variations of the ancient floras are of unusual interest. No less suggestive are his inferences regarding the climates of former ages and the general character of the vegetation. Schenk's views on such subjects frequently differ from those of Ettingshausen and Heer.

The Marquis of Saporta (1823-95), the head of a noble family, devoted all his leisure to the study of botany, and in 1860 began to interest himself especially in fossil plants. His writings are among the most valuable descriptions that have been given of fossil floras. They deal largely with the rich Tertiary floras of Southern France. He described the famous flora in the gypsum beds of Aix, in the Lower Eocene travertine deposits of Sezanne (1865), in the marls of Gelinden (1873), and in the Pliocene deposits of Meximieux (1876). Saporta was also the author of several successful popular works,[1] which

[1] The most widely circulated of Saporta's books are *The World of Plants before the Appearance of Man* (Paris, 1881 and 1885) and *The Palæontological Origin of Trees* (Paris, 1888).