
Cedrus libani

FREDERIC WEBER has, since childhood, had the privilege of observing the cedar of Lebanon that has been growing at Le Vallon in Switzerland since the early nineteenth century. Here he lists the differences between *Cedrus libani* and *C. atlantica* that distinguish these sometimes confused species.

The first thing you see, when entering the Vallon is a magnificent *Cedrus libani*, planted by my ancestor Jean-Jacques Kunkler in 1816. His daughter Laure Kunkler married Alphonse de Candolle the son of the great botanist Augustin-Pyramus de Candolle who probably introduced the *Cedrus libani* to Geneva. A member of the IDS, Dr Hans Peter Stutz, doctor in natural sciences in Winterthur, believes that it could well be a *Cedrus atlantica*. I have 13 reasons to believe that it is *C. libani* and I would even add that the second one is final.

Salient features of the *Cedrus libani* consistent with our cedar

1. According to the family archives, it was planted in 1816 by Jean-Jacques Kunkler as a *C. libani*, as was the prevailing fashion in Europe in those days as many were brought back by Napoleon and, as mentioned above, probably introduced to Geneva by Augustin-Pyramus de Candolle. A few years earlier, when Geneva was annexed to France, Jean-Jacques Kunkler became an officer in the French navy before 1806 and sailed as far as Indonesia.
2. It has a great quantity of male flowers and a tremendous abundance of pollen in November (*Conifers* by Keith Rushforth page 95: male cones shed pollen in November). Pollen production of *C. atlantica* would be much earlier in September (ditto page 94).
3. The *Cedrus libani* may develop a big vertical branch parallel to the trunk (*Trees in Britain* by Roger Phillips page 98). This is the case, but this point can be in contradiction with point 10. below.
- 4 The colour of the leaves can vary from deep green to grey-blue (*A Field Guide to the trees of Britain and Northern Europe* by Alan Mitchell page 93 and *The Hillier Manual of Trees and shrubs* page 426).
5. Huge branches sink down until they almost touch the ground (Mitchell page 117).
6. Some *C. libani* have an open top of slender arched branches (ditto). It is "...gradually assuming the familiar, picturesque, flat topped and tiered arrangement of a mature tree." (Hillier page 427). My uncles François and Roger de Candolle (former president of the IDS), some of my cousins and myself climbed right to the very top of the tree (32 metres) and we can testify that it was flat as we could well sit, almost comfortably, and admire the view.
7. It is slower growing than *Cedrus atlantica*. (Mitchell page 117). Around 1955 Uncle Roger planted three offshoots and they grew slowly especially the

first years. Now, after 55 years they just reach 16 metres.

Salient features of the *Cedrus atlantica* not consistent with our cedar

1. Branches become very large but do not spread out as much as *C. libani*. (Mitchell page 118).
2. The top remains conical (ditto).
3. Large branches are ascending and horizontal but seldom sink down (ditto).
4. The trunk often lacks branches on several metres (ditto). How could we have climbed to the top (point 6.).
5. Pollen in September (*Conifers* by Keith Rushforth page 94).
6. Most are *glauca*.

As mentioned above, in my opinion point 2. is final, but to be more flexible let me quote two experts commenting on *Cedrus atlantica*. First Alan Mitchell writes: "Some trees are so similar in foliage to *Cedrus libani* that the crown needs to be seen, and even then a few cannot be identified for certain." Hillier writes: "The Atlas cedar is said to differ from the cedar of Lebanon in a number of characters...but these minor differences are not consistent, varying from tree to tree. It is perhaps best considered as a geographical subspecies of *Cedrus libani*."