# *Cedrus* Tesi Group

While researching the genus *Cedrus* for Trees and Shrubs *Online*, TOM CHRISTIAN identified a hybrid that needed describing.

The classification and taxonomy of the genus *Cedrus* has become increasingly contentious in recent decades. Impassioned arguments exist in literature for recognising four, three, or only two species. *Cedrus deodara* has an isolated distribution in the Hindu Kush, Karakoram, and western Himalaya ranges in Asia, and its distinctiveness is rarely questioned, but the taxonomic position(s) of the Mediterranean populations is controversial (Christian, 2020).

These have traditionally been treated as three distinct species (*Cedrus libani, C. atlantica, C. brevifolia,* e.g. Debreczy & Rácz, 2011; Farjon, 1990; Davis, 1965), often as two (*C. libani* and *C. atlantica*, e.g. Farjon, 2017; Tutin *et al*., 1964), and more recently several molecular and phylogenetic studies have even suggested that the Mediterranean cedars represent a single species (*C. libani;* the taxonomic implication being that the other 'traditional' species should be treated at infraspecific rank e.g. *C. libani* subsp. *atlantica*) (Jasińska *et al*., 2013). Distinguishing between *Cedrus libani* and *C. atlantica* is notoriously difficult, and the reality is that the Mediterranean cedars probably comprise one, or certainly no more than two species. Nevertheless, they each have disjunct distributions, and distinct cultural histories both within their native ranges and in cultivation. For these reasons the recent revision of the genus for Trees and Shrubs *Online* elected to continue to recognise four species, because doing so better serves that site's primarily horticultural audience even if such a view does represent taxonomic conservatism (Christian, 2020).

The closeness of the Mediterranean species may be one reason that so few hybrids between these taxa are reported: if the traditional species are 'more or less impossible' (Farjon, 2017) to distinguish in some instances, what hope is there for hybrids! Hybrids between *C. deodara* and *C. atlantica* are, by contrast, widely reported (Christian, 2020). This cross has been made deliberately in cultivation in Italy and France, and it is known to occur sporadically wherever the two are grown together in warm climates, for example in South Africa (Knap, 2003). These hybrids have been sold under a confusing range of names, sometimes given as an unattributed cultivar, sometimes a nothospecies, and often erroneously as a *C. deodara* cultivar (*C. deodara* 'Ibrido').

Many of these names seem to invoke some permutation of the name 'Tesi'—this Italian horticultural dynasty has raised many such hybrids at its nurseries in northern Italy (Knap, 2003). Despite the surfeit of names that exists, there is no evidence that this hybrid has been validly published as a nothospecies. Furthermore, there is very little information in literature to suggest which of these names represent hybrid swarms (i.e. plants raised from batches of hybrid seed) and which (if any) are clonal. Given that so many are known to be seed raised, from sporadic events where the parents grow together and in controlled environments (Knap, 2003), a name is required to simplify the situation and provide a valid nomenclatural 'home' for such material. Given the debate about the classification of the genus, a formal publication of a nothospecies seems inappropriate, especially in such a small genus without any history of validly published hybrid binomials. Instead, a cultivar group is proposed:

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Hybrids between any form of *Cedrus deodara* and *C. atlantica* (*C. libani* subsp. *atlantica*). Trees appear entirely intermediate between their parents but may be distinguished from both in the following ways: habit (wider spreading than *C. deodara*, broad-pyramidal in outline); first order branches ascending (at least in young trees) and gradually nodding at the tips (neither level nor ascending as in *C. atlantica*, nor abruptly nodding or pendulous as in *C. deodara*). The

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*Cedrus* Tesi Group growing at the Yorkshire Arboretum.

foliage is variably glaucescent, but the combination of long needles (a proportion >3 cm long), wide-spreading branches with gradually nodding tips, and a pyramidal outline, are distinctive in combination. Named for the Tesi family of Italian horticulturists who have raised many such hybrids.

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