

Some recent proposals in *Platanthera* (Orchidaceae) systematics in Western Europe

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Recent research on *Platanthera* in Western Europe has shed new light on the structure of sympatric populations of the two widespread species *P. bifolia* and *P. chlorantha* including intermediate looking individuals, as well as populations comprising mainly or exclusively such intermediate plants. Based on morphological, molecular and chemical arguments, it was demonstrated, in the first case, that most so-called “intermediates” are in fact representatives of *P. bifolia*, while in the second case, “non-hybrid” intermediates constitute an independent lineage, which was given the name *P. muelleri*. True hybrids between the first two species seem to be very rare. Other situations with mainly intermediate looking individuals between *P. bifolia* (s.l.) and *P. chlorantha* in Southern Italy were given the name *P. bifolia* subsp. *osca*.

Other morphological and ecological comparisons conducted in Belgium plead toward recognition of two independent taxa within *P. bifolia*. The latter name should be restricted to allopatric populations growing on acid soil, in open areas with fresh to marshy conditions. On the other hand, *P. bifolia* populations, often growing in sympatry with *P. chlorantha* as described above, on basic soil, in semi-open to shaded habitats, could be given the name *P. fornicata*.

The paper further discusses unresolved situations that would deserve additional research.