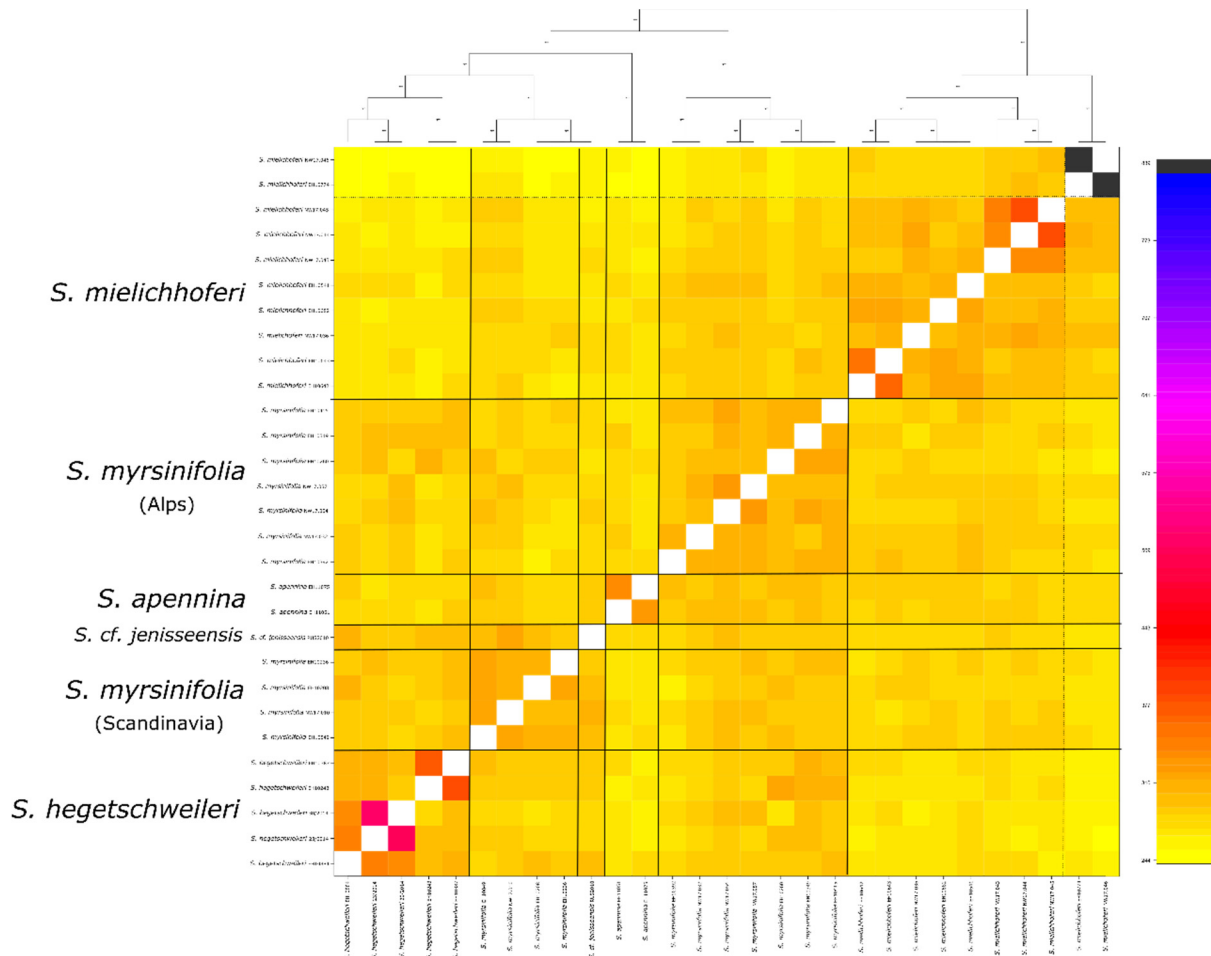
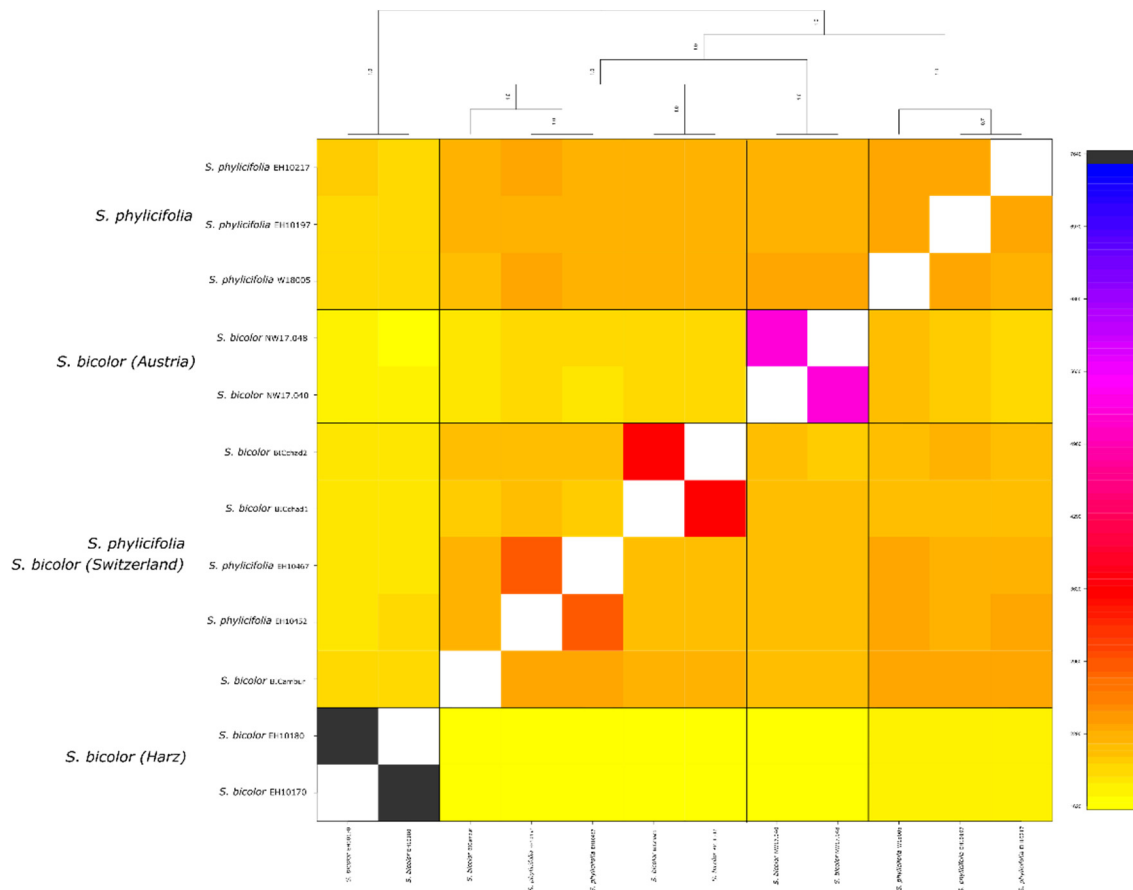


**Supplement Fig S3** - Clade wise co-ancestry matrix for *Nigricantes* and *Phylicifoliae*

**Fig S3 a.** Co-ancestry matrix of the section *Nigricantes* clade based on 8,164 RAD loci (17% missing data). The species *S. mielichhoferi* and *S. myrsinifolia* show levels of shared loci (co-ancestry; orange to red coloured squares). The samples of *S. hegetschweileri* and *S. myrsinifolia* also show levels of co-ancestry or hybridisation, respectively. *Salix cf. jensseensis* shows a higher co-ancestry with Scandinavian *S. myrsinifolia* samples than with alpine samples.



**Fig S3 b.** Co-ancestry matrix resulting from RADpainter based on 27,010 RAD loci (6.51% missing data) of *S. phyllicifolia* and *S. bicolor*. The samples from Harz Mountain are separate and show very low levels of co-ancestry (yellow color). Triploid samples from Austria show only low levels of co-ancestry with the remaining samples, while hexaploid samples of *S. phyllicifolia* and *S. bicolor* from Switzerland show high number of shared loci indicated by orange and red colors.