PP-19 S-locus diversity of sweet cherry varieties from Galicia, North Western Spain

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Prunus avium is a native tree in Europe. Different environmental conditions have allowed the selection of ecotypes adapted to different regions. In Spain marked environmental conditions are found between the eastern regions, under Mediterranean influence, and the north and north Western areas near the Atlantic Ocean coasts. While several works have investigated the genetic diversity and the S-locus of local sweet cherry varieties from different areas from Spain, to our knowledge, no previous work has studied local plant material from Galicia (North Western Spain). In this work, a group of local sweet cherry varieties from Galicia have been initially investigated to study the diversity at the S-locus and to establish their genetic cross-compatibility. S-locus genotyping was carried out by PCR, analysing the S-locus genes, S-RNase and SFB. This information was used to assign each variety to their corresponding incompatibility group (IG). Differences in the identity and frequency of the S-haplotypes identified were observed when compared to most cultivated sweet cherry and local sweet cherry varieties from other regions of Spain. Further studies are in progress to complete their molecular and morphological characterization in order to assess their interest for breeding.