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BOOK OF ABSTRACTS*

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ABSTRACTS OF ORAL PRESENTATION

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Numerical classification and syntaxonomy of Turkish fir forests

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Fir forests in Turkey cover approximately 584.871 ha (~2.62% of the total forest area). There are two species of fir: *Abies nordmanniana* (including subsp. *bornmuelleriana* and subsp. *equi-trojani*), distributed in the Euro-Siberian phytogeographic region, and *Abies cilicica*, distributed on the Taurus and Amanos mountains in the Mediterranean region. Fir forests of Turkey were classified using a forest vegetation-plot database (823 plots; 808 species). The dataset was a priori divided into coniferous and deciduous-mixed forests according to the percentage tree cover. When the total cover of deciduous tree species reached at least 1/3 of the total cover of the tree layer, the plot was assigned to the deciduous-mixed forests, while with a total cover of deciduous tree species less than 1/3 was assigned to coniferous forests. Classification was carried out using TWINSPAN. While *A. nordmanniana* subsp. *nordmanniana* forests were only classified as coniferous forests (*Vaccinio-Piceetea*, 6-7), the subsp. *bornmuelleriana* and the *equi-trojani* forests were both represented under coniferous (*Vaccinio-Piceetea*, 4-5) and deciduous-mixed forests (*Carpino-Fagetea*, 1-3). The subsp. *equi-trojani* forests did not differ much from the subsp. *bornmuelleriana* forests being assigned to the same communities. *A. cilicica* forests (*Quercetea pubescentis*, 1-2 and *Erico-Pinetea*, 3) were largely placed in coniferous forests except for mixed forests with *Fagus orientalis* in the Amanos Mountains. Based on the results, the following syntaxonomical scheme for Turkish fir forests is proposed:
Quercetea pubescentis Doing-Kraft ex Scamoni et Passarge 1959
Querco-Cedretalia libani Barbéro et al. 1974
Abieto cilicicae-Cedrion libani Barbéro, Loisel et Quézel 1974
1-2: *Acero tauricoli-Abietetum cilicicae* Quézel et al. 1992
Erico-Pinetea Horvat 1959
Erico-Pinetalia Horvat 1959
Adenocarpo complicati-Pinion nigrae Quézel, Barbéro et Akman 1977
3: *Adenocarpo complicati-Pinetum pallasianae* Akman et al. 1983
Vaccinio-Piceetea Br.-Bl. in Br.-Bl. et al. 1939
Abieti nordmannianae-Piceetalia orientalis Çoban et Willner 2019
Lonicero caucasicae-Piceion orientalis Çoban et Willner 2019
4: Pruno *laurocerasi-Fagetum orientalis abietetosum bornmuellerianae* Quézel et al. 1992
5: *Hieracio tossiani-Abietetum bornmuellerianae* Quézel et al. 1992
6: *Picea orientalis-Abies nordmanniana* forest (*Abieti nordmannianae-Pinetum sylvestris* Eminağaoğlu et Anşin, 2007, *Abieti nordmannianae-Piceetum orientalis* Eminağaoğlu et Anşin, 2007)

7: *Pinus sylvestris-Abies nordmanniana* forest (*Vaccinio myrtilli-Piceetum orientalis* Quézel et al. 1992, *Lilio ciliati-Pineetum* sylvestris Quézel et al. 1992)
Carpino-Fagetea sylvaticae Jakucs ex Passarge 1968
Rhododendro pontici-Fagetalia orientalis Passarge 1981
Fagion orientalis Soó 1964
Abieti bornmuellerianae-Fagenion orientalis Çoban et Willner 2019
1: *Pyrolo secundae-Fagetum orientalis* Akman et al. ex Quézel et al. 1992
2: *Fagus orientalis-Abies nordmanniana* mixed forests
3: *Telekio speciosae-Abietetum bornmuellerianae* Quézel et al. 1992