STAND 32 (P38) Diversity of soft bottom macroinvertebrates from Canary Islands, Spain.

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One hundred and fifty three samples were taken at five coastal areas of Tenerife, La Palma, Gran Canaria and Lanzarote, Canary Islands. Samples were collected by means of a square metallic box sampler with dimensions of 20 x 20 cm side and 20 cm height, corresponding to a volume of 800 cm^3. The total macroinvertebrate number and number of species were calculated for each sample. During the study 2,890 individuals were processed. A total of 225 species were identified, polychaetes and crustaceans were the most abundance groups with 140 and 47 species respectively. Indices of Diversity H' (Shannon), Evennes E (Pielou) and Richness D (Margalef) were also calculated. Significant differences in diversity were observed among islands and different communities. The accumulated diversity index values consistently fluctuated around an approximate diversity value of 2. Greatest diversity was observed in the eastern islands (Lanzarote and Gran Canaria) and the smallest values were in La Palma.

Stands 33- 40 Themes 5-7 Ecosystems, Biodiversity and EU Framework Directives

STAND 33 (P01) Anthropogenic succession of *Juniperus brevifolia* forests in Terceira Island (Azores).

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We addressed the following questions regarding the anthropogenic succession of *Juniperus brevifolia* forests in Terceira Island: Are there different successional pathways as a result of substrate features, namely geology? Are there different abilities of establishment and persistence, among the tree species, in the recovering vegetation? Are there irreversible thresholds which may prevent disturbed vegetation from spontaneously returning to the original vegetation? Ten 25 m^2 plots were established in areas subjected to different degrees of disturbance as a result of livestock activities. Data on floristic composition, vegetation biovolume, structure and demography were collected. Two successional pathways were identified: in areas with pumice down fall deposits *Calluna vulgaris* is the main colonizing species; on younger lava substrates, without pumice deposits, the main colonizing species is *Erica azorica*. *Juniperus brevifolia* is a good gap colonizer and establishes early in the succession, becoming, successively, the dominant shrub and canopy species as succession develops. *Laurus azorica* and *Ilex perado* ssp. *azorica* seedlings appear mostly when there is already a *Juniperus brevifolia* canopy present. Spontaneous return to the original vegetation seems possible even in those areas were tree species were completely removed.