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Organizing Committee	III
Foreword	v
Program.....	7
Conferences	11
Pre-Linnaean references to the Macaronesian Flora	13
Vascular Flora of Madeira: diversity, endemism and conservation	14
The discovery of oceanic island floras.....	15
The genetic diversity discontinuity in the Canary Islands flora: possible origins, links, and consequences	16
How do bryophytes face the challenge of a changing environment? Lessons from the past and predictions for the future	17
Origin of the flora of the Azores: colonization patterns and speciation processes	18
Review of the marine phycological studies in the Macaronesian Archipelagos	19
Overview of habitat history in subtropical oceanic island summit ecosystems.....	20
Preventing and managing plant invasions on oceanic islands	21
Syntaxonomy of the vegetation of the Azores archipelago.....	22
SEEING RED: The Conservation Status of the Macaronesian Flora	23
Oral Presentations	25
Scientific expeditions in Cape Verde: contribution to the knowledge on islands' flora	27
Paleobotany of Madeira Island: Historical perspective of the leaf-beds and collections of S. Jorge and Porto da Cruz.....	28
Toward an understanding of marine algal diversity patterns, a combined historical and ecological approach	29
Hybridization and the fern flora of Macaronesia	30
<i>Pericallis</i> and the Azores Diversity Enigma	31
Variation in floral traits of Canary and Iberian populations of <i>Limonium lobatum</i>	32
Species diversification and island's geological history: genus <i>Micromeria</i> (Lamiaceae) in Tenerife	33
Phylogenetic analysis of the Canary Islands representatives of <i>Micromeria</i> (Lamiaceae) using multiple nuclear EPIC markers	34
Conservation of the Azorean <i>Leontodon</i> , using microsatellites.....	35
Genetic diversity in lichen forming fungal species <i>Parmotrema tinctorium</i> (Parmeliaceae, Ascomycota) in Canary Islands.	36
Phylogenetic relationships of <i>Andryala</i> L. (Asteraceae): emphasis on the Macaronesian taxa	37
To what extent do microsatellite markers reflect diversification differences between oceanic and continental islands? The case of <i>Neochamaelea</i> and <i>Cneorum</i> (Rutaceae)	38
Genetic diversity in the Canary endemic <i>Limonium macrophyllum</i> using microsatellite markers	39
Population genetics and conservation of the Azorean tree <i>Picconia azorica</i> (Tutin) Knobl.	40
Genetic diversity of endemic species from the Canary Islands: a case study from <i>Ruta</i> L. (Rutaceae)	41

Molecular phylogeny of wild relatives of sugar beet (<i>Beta</i> and <i>Patellifolia</i> genera: Amaranthaceae) in Portugal and Macaronesian Islands	42
Microsatellite markers reveal the genetic structure of the Macaronesian <i>Tolpis azorica</i> and <i>Tolpis succulenta</i>	43
Species circumscriptions and phylogeography of Macaronesian pleurocarpous mosses	44
The allozyme genetic diversity of the Canarian flora, other oceanic islands and some continental congeners: relationships with biotic (reproductive) and abiotic factors. Conservation implications.....	45
Laurel forest - a relict vegetation type?	46
The biogeography of Macaronesian Lauraceae.....	47
Palaeoecological evidences from La Gomera (Canary Islands): an overview into the forest dynamics.....	48
Habitat losses predict future mass extinctions of endemic plants on the Canary Islands.....	49
Predicting successful replacement of <i>Pittosporum undulatum</i> by <i>Morella faya</i> in the Azores	50
Landscape repeat photography: Solutions to improve efficiency of a useful tool for vegetation research.....	51
Invasive alien plants in the Azorean protected areas: invasion status and mitigation actions.....	52
A multidisciplinary contribution to the conservation of Madeira's bryoflora: a perspective from several case studies	53
Areas of potential conflict between the laurel forests and invasion by exotic trees	54
Poster Presentations.....	55
P01. First record of <i>Cobaea scandens</i> Cav. (Polemoniaceae) as naturalized plant in Madeira Island (Portugal).....	56
P02. New species of lichens for Madeira and Azores Islands.....	57
P03. New additions to the benthic marine algae of the Azores.....	58
P04. <i>Andryala</i> L. (Asteraceae): taxonomical novelties on the Island of Madeira (Portugal).....	59
P05. New records of Macroalgae from Madeira Archipelago.....	60
P06. Paleobotany of Madeira Island: Review of the XIX century macroflora collections of S. Jorge and Porto da Cruz.....	61
P07. First record of freshwater diatoms from Desertas Islands (Madeira, Portugal)	62
P08. Recent contributions to knowledge of the vascular flora of Porto Santo Island.....	63
P09. New taxonomic approach for the Madeira archipelago <i>Sonchus</i> L. subgen. <i>Dendrosonchus</i> (Asteraceae) taxa.	64
P10. On the coastal microphytoplankton of Madeira Island with some historical notes.....	65
P11. Chorology and taxonomy of the genus <i>Matthiola</i> section <i>Pachynotum</i> DC in Madeira.....	66
P12. Molecular and biometrical approach to <i>Aichryson villosum</i> (Aiton) Webb & Berthel. a Macaronesian endemic (Azores and Madeira).....	67
P13. First record of <i>Billardiera heterophylla</i> (Lindl.) L. Cayzer & Crisp (Pittosporaceae) as naturalized plant in Madeira Island (Portugal).....	68
P14. Ethnobotanical Contribution for Madeira Island	69
P15. The Herbarium MADM – presentation	70
P16. Hypervariable ISSR markers as an aid for conservation strategies in <i>Heberdenia excelsa</i> and <i>Canarina canariensis</i>	71

P17. Development of new capabilities in the software Transformer-4 and the Demiurge information system (http://demiurge-project.org/)	72
P18. Goals for Plant Conservation until 2020. The contribution of Faial's Botanical Garden.....	73
P19. Genetic diversity and molecular taxonomy of <i>Sinapidendron</i> Lowe (Brassicaceae) based on molecular markers.....	74
P20. Intra-population genetic variability of <i>Normania triphylla</i> (Lowe) Lowe (Solanaceae) based on ISSR markers.....	75
P21. Phylogenetical analysis of Madeiran subgenus <i>Dendrosonchus</i> Sch.Bip. ex Boulos taxa (<i>Sonchus</i> L., Asteraceae)	76
P22. Molecular taxonomic identification in the absence of a "barcoding gap": a hard test with the endemic flora of the Canarian oceanic hotspot.....	77
P23. Total lipid content, fatty acid profile and nutritional value of selected macroalgae from S. Miguel Island littoral zone	78
P24. Characterization and quantification of total carbohydrates of selected macroalgae from S. Miguel litoral zone	79
P25. Extraction and quantification of water-soluble vitamins from selected macroalgae by RP-HPLC	80
P26. Long-distance dispersal or large-scale extinction? Explaining the extreme "Rand Flora" disjunction in the bellflower genus <i>Canarina</i>	81
P27. Can islets be considered repositories of neighbouring coastal biodiversity?	82
P28. Long-term vegetation dynamics during the Holocene in Tenerife: evidences of stability from the pollen record	83
P29. Plant physiology research in university-level classes using Azorean native taxa: <i>Dracaena draco</i> , <i>Prunus lusitanica</i> ssp. <i>azorica</i> , <i>Vaccinium cylindraceum</i> , <i>Viburnum treleasei</i> and <i>Lotus azoricus</i>	84
P30. Population genetics and conservation of the Azorean tree <i>Prunus azorica</i> (Mouill.) Rivas Mart., Lousã, Fern. Prieto, E. Dias, J. C. Costa & C. Aguiar	85
P31. Assessment of cryptogamic floristic and genetic diversity in Madeira's Laurel forest. A tool for management of Madeira's natural forest	86
P32. On the origin of selected thallose liverworts of the Madeiran flora: affinities to eastern Asia and the Caribbean.....	87
P33. Origin of <i>Rumex bucephalophorus</i> subsp. <i>canariensis</i> (Polygonaceae) in Macaronesia and colonisation sequence among the islands	88
P34. Geographic pattern of flower colour distribution in <i>Lysimachia arvensis</i> : the role of pleiotropic effects on floral colour polymorphism	89
P35. Distribution of the genus <i>Dasya</i> in Madeira archipelago.....	90
P36. Seagrass meadow of <i>Cymodocea nodosa</i> at south coast of Madeira Island – a priority habitat in the EU Habitat Directive	91
P37. Homogenization of island biotas due to alien species depends on the scale, grain and taxonomic group studied	92
P38. A pollen's-eye view of Azorean vegetation – some insights from Flores	93
P39. Seedling bank's structure and dynamic of the relict laurel forest of the Canary Islands.....	94
P40. Diversity, Distribution and Seasonal Changes of Intertidal Macroalgae from Madeira Island	95
P41. Modeling the distribution of the laurel forests at Madeira Island: results from a species ensemble forecasting approach.....	96

P42. Dominant species of the spring phytoplankton communities of lakes from São Miguel Island (Azores)	97
P43. Readapting IUCN criteria to oceanic islands. Conservation implications for threatened bryophytes in the Canary Islands	98
P44. Post-fire treatments in Laurel forest. A benefit for the ecosystem or an unnecessary expense?.....	99
P45. Life+ Inagua: Measures to improve the conservation state of <i>Limonium vigoense</i> and <i>Limonium sventenii</i> in Inagua, Gran Canaria Island.....	100
P46. Implications of fire age on <i>Pinus canariensis</i> recruitment dynamic.	101
P47. Project BIOCLIMAC: Climate Change and Reproductive Success. The case of two threatened Canaries endemic species of the genus <i>Atractylis</i> L. (Cardueae: Asteraceae)	102
P48. Recovery Plan of two threatened endemic species from Lanzarote (Canary Islands): <i>Helianthemum bramwelliorum</i> and <i>H. gonzalezferreri</i> (Cistaceae).....	103
P49. Conservation measures within the framework of the BIOCLIMAC project (MAC/1/CO67).	104
P50. Bioclimatic mapping of La Palma Island applying different interpolations techniques.....	105
P51. <i>In vitro</i> establishment of Azorean blueberry (<i>Vaccinium cylindraceum</i> Sm.) selected clones from São Miguel Island.....	106
P52. Application of the improved embryo germination and micropropagation protocol for commercial production of <i>Viburnum treleasei</i> Gand.....	107
P53. Propagation of the Azorean native <i>Calluna vulgaris</i> (L.) Hull by seed and cuttings.	108
P54. Propagation of the Azorean native <i>Morella faya</i> (Aiton) Wilbur by seed and cuttings.....	109
P55. <i>In vitro</i> culture establishment of <i>Juniperus brevifolia</i> , <i>Picconia azorica</i> , <i>Prunus lusitanica</i> ssp. <i>azorica</i> and <i>Ilex perado</i> ssp. <i>azorica</i> from mature trees of São Miguel Island.....	110
P56. Changes in plant community composition along an altitudinal gradient on a coastal protected area in the Azores.....	111
P57. Germination ecology of two Poaceae: <i>Pennisetum setaceum</i> (Forssk.) Chiov (invasive) and <i>Cenchrus ciliaris</i> L. (native)	112
P58. Assessment of the invasiveness of exotic flora: using uninhabited Santa Luzia Island (Cape Verde) as a model	113
P59. Spatial patterns of distribution of non-indigenous marine species in urban coastal areas: the influence of vessel traffic activity	114
P60. Study of phytobenthic communities on cobble beaches around Gran Canaria (Canary Island)	115
P61. Isolation and screening of indigenous strains of <i>Haematococcus pluvialis</i> Flotow for biomass and astaxanthin production	116
Authors Index.....	117
Participants List.....	121
FLORAMAC 2012 – MADEIRA EXCURSION –Field short notes.....	127

P24. Characterization and quantification of total carbohydrates of selected macroalgae from S. Miguel littoral zone

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The ever increasing human population around the world has kept the human community in constant search for new resources to meet the growing demand for food, and medicine. The marine ecosystem, particularly the macroalgae, appears to be a candidate as a natural resource for these needs. Their nutritional value has been widely studied and differs, for the same species, according to different origins and also reflects the influence of geographic origin, climate, season, variety species and seasonal conditions. In addition to their value for human nutrition, the seaweeds may also contribute to a healthy human life. The archipelago of the Azores has a long tradition in the use of marine macroalgae, commonly referred to as "seaweeds", as fertilizers in local agriculture and/or horticulture, and also as food supplements. The consumption of seaweeds is widespread and accepted as a common practice in some of the islands. Being isolated in the middle of the Atlantic Ocean and taking into account the low pollution levels of seawater, the Azores Islands have become a very promising location as a natural resource for marine macroalgae with potential for providing new ingredients of so-called functional or health-promoting foods. In the present study we evaluate the total carbohydrates content of six selected macroalgae collected in the littoral zone of S. Miguel Island, Azores, Portugal: two Chlorophyta, *Chaetomorpha linum* and *Codium adhaerens*, and four Phaeophyta, *Cystoseira humilis*, *Padina pavonica*, *Sargassum cymosum* and *Sargassum vulgare*. The total carbohydrates content ranged from 7.61% to 16.78% of dry weight, in *Padina pavonica* and *Codium adhaerens*, respectively. Characterization of carbohydrates was also performed in all species.