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An up-to-date checklist of the vascular plants of Macaronesia (the Azores, the Madeira archipelago, the Salvage Islands, the Canary Island, and the Cape Verde Islands) is given. 3,106 species belonging to 1,062 genera are listed, as are also a number of intraspecific taxa down to variety level. 20 new nomenclatural combinations are made within the genera *Atalanthus*, *Lavandula*, *Pericallis*, *Satureja*, and *Sinapidendron*. A second section lists ca. 2,300 synonyms and their presumed identity.

Keywords: Macaronesia, Azores, Madeira, Salvage Islands, Canary Islands, Cape Verde Islands, Vascular plants.

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INTRODUCTION

The present paper aims at giving a complete and up-to-date list of the vascular plants of the five Macaronesian archipelagos (viz., the Azores, Madeira, the Salvage Islands, the Canary Islands, and the Cape Verde Islands), based on our present knowledge of the flora of these islands. The list represents a continuation and revision of the three first editions (1974, 1979, and 1985) of the checklist. Taxonomic, nomenclatural and floristic work have been actively performed within the archipelagos, and compared to the 1985 edition some 200 species have been added to the flora, as well as more than 900 new distribution data (i.e., new island records). The number of additions has, relatively seen, been largest in the Cape Verde Islands.

Within each of the four parts Pteridophyta, Gymnospermae (Pinophyta), Dicotyledoneae (Magnoliatae), and Monocotyledoneae (Liliatae), the families, the genera (1,062) within each family, and the species (3,106) within each genus are arranged in alphabetical order. Only species stated to have been recorded as spontaneous or naturalized plants within the archipelagos have been included. As practise in floristical literature on the archipelagos, however, have been somewhat different with regard to inclusion of cultivated plants, this has not always been easy to do consistently. Hybrids are normally listed under their respective parental names, followed by their hybrid names - if given - listed in brackets.

Endemics are especially marked in the list by a black dot. "Endemic" is here understood as endemic only to the particular islands with which we are concerned. Species besides occurring in the so-called Macaronesian enclave in the African mainland and/or in single localities in the Iberian peninsula are thus not regarded as Macaronesian endemics in this connection. The dots indicating endemism are used to mark whether a certain taxon - isolated seen - is endemic in this respect. As taxa of succeeding hierarchic rank are often designated endemics independent of each other, the number of dots are thus higher than the number of true endemics.

A second section lists 2,327 synonyms frequently used, especially in older Macaronesian taxonomic and floristic literature. No attempt has been made to reach completeness in this list. It is mainly intended as a means to find the proper names - or the names used in the main part of the checklist - for taxa where orientation among alternative names has become difficult from the many nomenclatural changes in the course of time.

CHECKLIST

The following codes for the islands are used in the checklist (with codes for the archipelagos used if locality citations are unprecise, given in *italics*, after the name of each archipelago):

Azores (<i>Az</i>)	S	Santa Maria
	M	São Miguel
	T	Terceira
	G	Graciosa
	J	São Jorge
	P	Pico
	F	Faial
	L	Flores
	C	Corvo
Madeira (<i>Mad</i>)	M	Madeira
	D	Desertas
	P	Porto Santo
Salvage Islands (<i>Sal</i>)	S	Salvage Oslands (Selvagem Grande, Selvagem Pequena and Ilhéu de Fora)
Canary Islands (<i>Can</i>)	L	Lanzarote
	F	Fuerteventura
	C	Gran Canaria
	T	Tenerife
	G	Gomera
	H	Hierro
	P	La Palma
Cape Verde Islands (<i>CV</i>)	A	Santo Antão
	V	São Vicente
	L	Santa Luzia (incl. Ilhéu Branco and Ilhéu Raso)
	N	São Nicolau
	S	Sal
	B	Boavista
	M	Maio
	T	Santiago
	F	Fogo
R	Brava	

 Taxon

PTERIDOPHYTA

Actiniopteridaceae*Actiniopteris radiata* (Sw.) Link**Adiantaceae***Adiantum aneitense* Carruth.*Adiantum capillus-veneris* L.var. *capillus-veneris*

- var.
- trifidum*
- (Willd.) Béguin.

Adiantum hispidulum Sw.*Adiantum incisum* Forssk.*Adiantum philippense* L.*Adiantum raddianum* C. Presl*Adiantum reniforme* L.var. *reniforme*

- var.
- pusillum*
- Bolle

Aspleniaceae*Asplenium adiantum-nigrum* L.*Asplenium adiantum-nigrum* x *billotii*[*A.* x *sarniense* Sleep]*Asplenium adiantum-nigrum* x *onopteris*[*A.* x *ticinense* D.E. Meyer]*Asplenium aethiopicum* (Burm.fil.) Becherer

- ssp.
- braithwaitii*
- Ormonde

-
- Asplenium anceps*
- Lowe ex Hook. et Grev.

-
- Asplenium anceps*
- x
- Ceterach aureum*

[x*Asplenoceterach newmanii* (Bolle) D.E. Meyer]

-
- Asplenium azoricum*
- Lovis, Rasb. et Reichst.

Asplenium billotii F.W. Schultz

-
- Asplenium billotii*
- x
- terorensis*

Asplenium filare (Forssk.) Alston

- ssp.
- canariense*
- (Willd.) Ormonde

Asplenium hemionitis L.var. *hemionitis*

- var.
- longelobatum*
- Kunk.

Asplenium marinum L.*Asplenium monanthes* L.*Asplenium obovatum* Viv.

SMTGJ PFLC MDP S LFCTGHP AVLNSBMTFR

						A	N	F	A.rad.
		F							A.ane.
	SMT	FL	MDP	LFCTGHP	AV	N	TFR		A.cap.
	M	PF	M	T	A	N	TF		
					AV	N	TFR		A.his.
	M	PFL	M	CT	A	N	TF		A.inc.
			M P	LFCTGHP					A.phi.
			M	CTGHP	A				A.rad.
									A.ren.
	M	J	M	FCT				F	A.adi.
		P							
Az			M						
			M	T HP	AV	N	TF		A.aet.
		P	M	P					A.anc.
	SMTGJ PFLC								A.azo.
	SMTGJ PFLC	MDP		LFC	H				A.bil.
				C					
				T HP					A.fil.
	SMTGJ PFLC	MDP		LFCTGHP	A	N	FR		A.hem.
				G					
CV	SMTGJ PFLC	MDP	S	FCTGHP					A.mar.
	MT J PFLC	M		P					A.mon.
				C	H				A.obo.

 Taxon

Asplenium obovatum x *onopteris*

[*A. x joncheeri* D.E. Meyer]

Asplenium onopteris L.

var. *onopteris*

- var. *triangularis* Kunk.

Asplenium scolopendrium L.

Asplenium septentrionale (L.) Hoffm.

- *Asplenium terorense* Kunk.

Asplenium trichomanes L.

- ssp. *maderense* Gibby et Lovis

ssp. *quadri-valens* D.E. Meyer

- *Ceterach aureum* (Cav.) Buch

- var. *aureum*

- var. *parvifolium* Benl et Kunk.

- *Ceterach lolegnamense* Gibby et Lovis

Athyriaceae

Athyrium filix-femina (L.) Roth

Cystopteris fragilis (L.) Bernh. s.l.

Deparia petersenii (Kunze) M. Kato

Diplazium caudatum (Cav.) Jermy

Diplazium esculentum (Retz.) Sw.

Hypodematium crenatum (Forssk.) Kuhn

Azollaceae

Azolla filiculoides Lam.

Blechnaceae

Blechnum occidentale L.

Blechnum spicant (L.) Roth

Doodia caudata (Cav.) R. Br.

Woodwardia radicans (L.) J.E. Sm.

Cryptogrammaceae

Onychium japonicum (Thunb.) G. Kunze

Cyatheaceae

Sphaeropteris cooperi (Hook. et F. v. Muell.) Tryon

SMTGJPFLC	MDP	S	LFCTGHP	AVLNSBMTFR	
	M		C		
SMTGJPFLC	M		LFCTGHP		A.ono.
			G		
SMT JPFLC	M		CT		A.sco.
	M		T P		A.sep.
			C		A.ter.
	M				A.tri.
SMT JPF C	M		CTGHP	A	
	M		LFCTGHP	A	C.aur.
			CT P		
	M				C.lol.
SMTGJPFLC	M		CTGHP		A.fil.
SMTGJPFLC	M		CTGHP	A	C.fra.
SMT JPFLC					D.pet.
SMTGJPFLC	M		CTG P	A	D.cau.
M				AV N B TFR	D.desc.
					H.cre.
			CT		A.fil.
M					B.occ.
SMTGJPFLC	M		TG		B.spi.
MT PF	M				D.cau.
SMT JPFLC	M		CTG P		W.rad.
M	PF				O.jap.
SMT	F				S.coo.

 Taxon

Davalliaceae*Davallia canariensis* (L.) J.E. Sm.**Dicksoniaceae***Culcita macrocarpa* C. Presl*Dicksonia antarctica* Labill.**Dryopteridaceae***Cyrtomium falcatum* (L. fil.) C. Presl*Dryopteris aemula* (Ait.) O. Kuntze

-
- Dryopteris aemula*
- x
- crispifolia*

[*D.* x *martinsiae* Fr.-Jenk.]*Dryopteris aemula* x *guanchica*[*D.* x *gomerica* Gibby et Widén]*Dryopteris affinis* (Lowe) Fr.-Jenk.ssp. *affinis*var. *affinis*

- var. *azorica* Fr.-Jenk.
 - *Dryopteris affinis* ssp. *affinis* x *intermedia* ssp. *azorica*
[*D.* x *picoënsis* Fr.-Jenk.]
 - *Dryopteris aitoniana* Pic.-Serm.
 - *Dryopteris aitoniana* x *intermedia* ssp. *maderensis*
[*D.* x *furadensis* Bennert, Rasb., Reichst. et Viane]
 - *Dryopteris crispifolia* Rasb., Reichst. et Vida
 - *Dryopteris crispifolia* x *dilatata*
[*D.* x *telesii* Fr.-Jenk.]
 - *Dryopteris crispifolia* x *intermedia* ssp. *azorica*
[*D.* x *madalenae* Fr.-Jenk.]
 - Dryopteris dilatata* (Hoffm.) A. Gray
 - *Dryopteris dilata* x *intermedia* ssp. *azorica*
[*D.* x *sjoegrenii* Fr.-Jenk.]
 - Dryopteris guanchica* Gibby et Jermy
 - *Dryopteris guanchica* x *oligodonta*
[*D.* x *cedroënsis* Gibby et Widén]
 - Dryopteris intermedia* (O.F. Muell. ex Willd.) A. Gray
 - ssp. *azorica* (Christ) Jermy
 - ssp. *maderensis* (Alston) Fr.-Jenk.
 - *Dryopteris oligodonta* (Desv.) Pic.-Serm.
 - Dryopteris pentheri* (Krasser) C. Chr.
 - Polystichum aculeatum* (L.) Roth
-

SMTGJPFLC MDP S LFCTGHP AVLNSBMTFR

M		MDP		LFCTGHP	AV N	TFR	D.can.
MT	JPFLC	M M		T			C.mac D.ant.
MT	JPFL	M	S	CT	P		C.fal.
SMTGJPFLC		M		G			Daem.
	P						
				G			
							D.aff.
MT	JPFL	M		G			
	P						
		M					D.ait.
		M					
M	PF						D.cri.
	P						
	P						D.dil.
	P						
				TG			D.gua.
				G			
							D.int.
SMT	JPFLC						
		M					
				CTGHP			D.oli.
						N	D.pen.
		M		G	P		P.acu.

 Taxon

- *Polystichum drepanum* (Sw.) C. Presl
- *Polystichum falcinellum* (Sw.) C. Presl
- *Polystichum falcinellum* x *setiferum*
 [*P.* x *maderense* Johnson]
 Polystichum setiferum (Forssk.) Moore ex Woynar
- *Polystichum webbianum* (A. Br.) C. Chr.

Elaphoglossaceae

- *Elaphoglossum semicylindricum* (Bowd.) Benl

Equisetaceae

- Equisetum arvense* L.
Equisetum ramossissimum Desf.
Equisetum telmateia Ehrh.

Grammitidiaceae

- Ceradenia jungermanioides* (Klotz.) Bishop
Grammitis ebenina (Maxon) Tardieu

Gymnogrammaceae

- Anogramma leptophylla* (L.) Link
Pityrogramma calomelanos (L.) Link
Pityrogramma chrysophylla (Sw.) Link
Pityrogramma ebenea (L.) Proctor

Hymenophyllaceae

- *Hymenophyllum maderense* Gibby et Lovis
- *Hymenophyllum maderense* x *wilsonii*
 Hymenophyllum tunbrigense (L.) J.E. Sm.
 Hymenophyllum wilsonii Hook.
 Trichomanes speciosum Willd.

Hypolepidaceae

- Microlepidia platyphylla* (Don) J.E. Sm.
Pteridium aquilinum (L.) Kuhn

Isoëtaceae

- *Isoëtes azorica* Dur. ex Milde
-

SMTGJPFLC		MDP	S	LFCTGHP	AVLNSBMTFR	
		M				P.dre.
		M				P.fal.
		M				
SMTGJPFLC		M		TG P		P.set.
		M				P.web.
MT JPFL		M				E.sem.
M						E.arv.
SMT		M		CTG P	AV N	E.aram.
SMT J FL		M P				E.tel.
	P					C.jun.
	P					Gebe.
SMT JPFLC		MDP		LFCTGHP	A N	A.lep.
MT F		M			TF	P.cal.
MT F						P.chr.
M						P.ebe.
		M				H.mad.
		M				
MT JPFLC		M		CTG		H.tun.
MT JP LC		MDP		CT		H.wil.
MTGJPFLC		M		CTGHP		T.spe.
		M				M.pla.
SMTGJPFLC		MDP	S	L CTGHP	A N	P.aqu.
					TFR	
T JPFLC						I.azo.

 Taxon

Lycopodiaceae

- *Diphasium madeirense* (Wilce) Rothm.
- Huperzia selago* (L.) Bernh. ex Schrank et Mart.
 ssp. *selago*
- ssp. *dentata* (Herter) Valentine
- Lycopodiella cernua* (L.) Pic.-Serm.
 var. *cernua*
- var. *caboverdeana* (Gilli) A. Hans. et Sund.
- Lycopodiella inundata* (L.) Holub
- *Lycopodiella veigae* (Vasc.) A. Hans. et Sund.

Marsileaceae

- *Marsilea azorica* Laun. et Paiva
- Marsilea coromandeliana* Willd.
- Marsilea quadrifolia* L.

Oleandraceae

- Nephrolepis cordifolia* (L.) C. Presl
- Nephrolepis exaltata* (L.) Schott
- Nephrolepis undulata* (Afz. ex Sw.) J.E. Sm.

Ophioglossaceae

- Botrychium lunaria* (L.) Sw.
- Ophioglossum azoricum* C. Presl
- Ophioglossum lancifolium* K.B. Presl
- Ophioglossum lusitanicum* L.
 ssp. *lusitanicum*
- Ophioglossum polyphyllum* A. Br. in Seub.
- Ophioglossum reticulatum* L.

Osmundaceae

- Osmunda regalis* L.

Polypodiaceae

- Polypodium aureum* L.
- Polypodium macaronesticum* Bobrov s.l.

Psilotaceae

- Psilotum nudum* (L.) PB.
-

SMTGJPFLC		MDP	S	LFCTGHP	AVLNSBMTFR	
M	JP LC	M				Dmad H.sel.
MT	JPFL	M				
MT	JPFLC	M				L.cer.
MT	PF	M				
M	P					F L.inu. L.vei.
		M				
T						Mazo. M.cor. M.qua.
				C		B
		M				
M				CT	P	
						A N TFR N.cor. N.exa. N.und.
	P	M				
T	FL	M		FC		
						N F B.lun. O.azo. O.lan. O.lus.
SMT	F	M P		CTGHP		
		M		FCT HP	AV	
					A N T R	O.pol. O.ret.
SMT	JPFLC	M			A	
						O.reg.
		M				
SMTGJPFLC		M P		LFCTGHP		
						P.aur. P.mac.
					A N R	P.nud.

 Taxon

Pteridaceae

- Pteris cretica* L.
Pteris incompleta Cav.
Pteris multifida Poir.
Pteris tremula R. Br.
Pteris vittata L.

Selaginellaceae

- Selaginella denticulata* (L.) Spring.
Selaginella kraussiana (G. Kunze) A. Br.
Selaginella selaginoides (L.) PB. ex Schrank et Mart.

Sinopteridaceae

- Cheilanthes acrostica* (Balb.) Tod.
Cheilanthes catanensis (Cos.) H.P. Fuchs
 ssp. *bivalens* (Reichst.) A. Hans. et Sund.
Cheilanthes guanchica Bolle
Cheilanthes guanchica x *tinaei*
 [C. x *insularis* Rasb. et Reichst.]
Cheilanthes maderensis Lowe
Cheilanthes maderensis x *pulchella*
 [C. x *teneriffae* Rasb. et Reichst.]
Cheilanthes marantae (L.) Domin
 ● ssp. *subcordata* (Cav.) Benl et Poelt
 ● var. *subcordata*
 ● var. *cupripaleacea* Benl
 ● *Cheilanthes pulchella* Bory ex Willd.
Cheilanthes tinaei Todaro
Pellaea viridis (Forssk.) Prantl

Thelypteridaceae

- Cyclosorus dentatus* (Forssk.) Ching
Oreopteris limbosperma (All.) Holub
Stegnogramma pozoi (Lag.) Iwatsuki
Thelypteris palustris Schott
-

SMTGJ PFLC MDP S LFCTGHP AVLNSBMTFR

MT					C					P.cre.
SMT	J PFLC	M			CTG	P				P.inc.
M	F	M				P				P.mul.
MT	F	M			CT					P.tre.
MT	J F	M			CTG	P	A	N	TFR	P.vit.

			MDP		CTGHP					S.den.
SMTGJ PFLC		M			CT	H				S.kra.
						H				S.sel.

		M		LFCTGHP	AV	N		F	C.acr.
				T				F	C.cat.

		M		FCTGHP					C.gua.
				T					

	P	M		LFCTGHP					C.mad.
				T					

C.mar.

		M		CTGHP	A	N	TF		
				T	H				

		M		CTGHP					C.pul.
		M		T					C.tin.
	P F	M			A	N	F		P.vir.

SMTGJ PFL	M			CTG	P	AV	N	TFR	C.den.
PFL	M								O.lim.
MT PFL	M								S.poz.
									T.pal.

Az

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