# JCA

## Trip No 11 Morocco JCA4300 – 4704 also ABS4300 - 4704 25th April - 7th May 1982

This trip was undertaken in the company of John Blanchard and Michael Salmon. The field numbers can be used with both JCA and ABS prefixes.

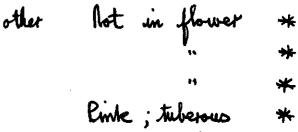
#### BLANCHARD

25 APRIL, 1982 : LOCALITY Nº 1 MON

FIELD COLL Nº		AREA LOCALITY -	>	ALTITUDE	HABITAT : GENERAL NOTES
4300	Romulea	Jangier	Both of Deilah	_	[loastal maquis of Eistacia and other low scrub ; sandy soil
4301	Narcissus? elegano		U Ja	P E	low sends; sandy soil
4302	Urginea	30	r,	34	2 11
4303	Scotzoneta	*1	p	18	14
4304	Narcissus serotinus	Js	. <b>†</b> \$	¥ .	B
4305	Bellevalia	11	35	tr	e 1
4306	W	••	11	#L	14
4307	Crocus	19	11	<b>t</b> \	41
4308	? Dipcadi / Cmithogahim	. 14	in .	. <b>t</b> ę /	41
4309	Salla	h	•1	<b>IX</b> .	••
4310	[Mixied bulls ex ploughed land]	35	•	•• •	• • • • • • • • • • • • • • • • • • •
	25 APRIL, 1982 : LOCALITY Nº 2				
4311	Dipeadi serotinim	N.W. Morocco	[ North of Soak el. Arba	150 m.	Recently disturbed sandy soil,
4312	Asphodelus		Soak el Arba		Recently disturbed sandy soil, adjacent to Eucalyptus plantation
·	26 APRIL, 1982 : LOCALITY Nº 3				
4313	Romulea	Middle attlas	Djebel Helmi	1,800 m.	Upen slopes and jidges of variou aspects; story soils
4314	Colchiam	11	Jelateou, above	43	aspects; story soils
4315	Romulea ? linasesii	89	Spone; north-wet	<b>₽</b> ₿2	4 1
4316	Colchicum	n	lof Muschliffen	€ <b>a</b> -	: }
4317	Romulea	10	19	, м,	1)
4318	Julipa australis	ţ.	n	<i>4</i> 3	<b>h</b>
4319	Gogea	14	n	n	tr
4320	lephodelus acaulis	• 1	n	13	· • • • • • • • • • • • • • • • • • • •
4321	Artemisia	1.	98	45	**
4322	Botaginaceae	Ft	n	h	22
4323	Ranusculus demissio	14	11	ч	h

OTHER

NOTES





Pale orange pink & green flower. Not in flower -\*

Not in various flower ¥ black com tuntes Utolet flowers; yellow throat ver \* Not in flower \* Yellow ¥ Not in flower ٭ tery dwarf Blue; lour shrub \* Yellow; tuberous; dissected

4353

Colcherin

4324	Crocus	Muddle atlas	Debel Hebri	1,800 m	Stony soil on open redges
4385	Gagea	· 8 •	Debel Hebri plateau, <del>21. of</del>	**	*,
4326	Ctocus	F.	Strane; NW of	н	Cleanings in cedar forest
4327	Julipa	tA	Mischliffen	47	· · · ·
4328	Dophne laureola batifolia	11	91 21	**	
4329	Rommaulus	*5	H	10	Among rocks and in woodland
4330	Carduncellus Maponticoides	**	¥#.	12	Open areas; usually in thirf
4331	dmim	*1	40 j.	**	Upen slopes; sandy and gravely
4332	Compositae	3.		14	lepen, stony areas
4333	Saxifinga	P)	<b>W</b>	<del>1</del> 0	In crevices among rocks in sha
4334	Draba lutescens	41	H	ti	Gencie on exposed slopes
4335	Matthiola	**	14	**	
4336	Paeonia corriacea athantica	17	10	**	In shade in cedar forest
4337	Scilla algeriensio	¥9	11	\$ <del>*</del>	In shade in cedar forest " ~ limestone poe
4338	Colchicim	**	<b>+</b> *	*	Open areas
4339	allerin	••	At	* <b>*</b> *	t≢
4340	-	83	ł •	41	¥4
4341	Vinithogalum	••	11	**	Thurfy cleanings in cedar forest
4348	Romulea	11	ч. Щ	<b>8</b> .	
434 <b>3</b>	Gagea	Đ	11	**	41
4344	Romulea	••	0	4.	lepen stopes ~ various aspec
4345	Vmithogalum	1+	<b>\$1</b>	£4,	1 1 1
4346	Gagea	•#	89	\$\$	tin
4347	Colchicum	*4	84	10	h.
4348	Unithogalum	*8		¥8,	<b>B1</b>
4349	Crocus	98	¥e	a*	<b>\$</b> ,
4350	11	n	14	8.0	<b>↓</b>
	87 APRIL : LOCALITY Nº 4	н	Above Sfrance	1,700 m.	
4351	Romulea 7				
4342	Colchicum				

**}+** 

Not in flower Yellow; pubescont palmate lu Not in flower Blue; prostrate. Sessile cream heads Dactyloides Sect. In fruit Bright carmine pinke Not in flower Bulbous " Not in flower Prostrate foliage; not in flour Elongated bulbs ; 16 Parallel fibres ; Entire (not fibrous) turie " lot in flower

lly sods

hade

soeketõ

eat

rects

July areas among limestone

1\$

27 APRIL, 1982 : LOCALITY Nº4

4354	Omithogalum	Middle Atlas	above Strane	1,700 m	Heavy red clos among limestone outerops
4355	Rominculus	25	et V	*;	
4356	Biajum	88	t)	4,	W
4357	Muscari grandifolium populeum	ч	18	£ #	+ 4
4358	Ciocus	38 .	<b>)</b> •	\$1	40
4359	Jagea	41	19 19	ð1	14
4360	Romulea	11	٩r	<i>4</i> 3	<b>A</b> 8
4361	Gjuga	n	89	64	¥.*
4362	Colchieum	11	69	H	<b>♦</b> ≠
4363	Rmulea	4	1)	1;	٠٠
4364	Armenia	14	Ve	61	et
4365	Ranissus	te	13	51	Most loam in turf; open depressions
4366	Conithogalum	н	11	٤,	у т т т
4367	Jagea	51	11	<i>be</i>	n
4368	Leopoldia	"	H .	k z	Restricted to clay filled 'dolines'
4369	haphodelus	15	- H	be	Upen slopes over limestone
4370	Ranunculus demissus	n	ta :	<b>8 8</b>	44
4371	Aphyllanthes monspeliensis	12	ц <u>.</u>	. <b>.</b> .	₹₹
4372	Vicia	11	i,	R.	Story clay at edge of woodland.
4373	Ronunculus calandrinioides	11	e i	31.	Story clay at edge of woodland. Sandy ledges on limitatione steps
4374	Romulea	13	t e	48	14
4375	Jabratae	4	51	••	e1
1376	Oprithogalum	h	••	11	47
1377	Narcissus bulbocoduin romienzi	11	n	17	{ sledges & pockets of leaf soil in mixed } { woodland
4378	Ornithogalum /4378A Ronulea Anthencum /4379A Orchis	. I)	• <b>1</b>	41	(woodland)
4379	anthencum /4379A Orchis	21	<b>8</b> .	41	Stony clay; wet fluch with surving water?
4380	Ratcusus		48	61	
4381	Iris planifolia	**	<b>61</b>	47.	Skeltered, S. facing slope against } woodband; limestone
4382	Advisses Leveryum autumnale publichellun	1, "	9t	69	woodland; limestone

2 outerapor Not in flower Dark blue from china -blue bud Not in flower Prostrate stens; hight yellow darge Large ; several flowers. Not in flower MS coll. Not in flower sono Yellow. Not in flower Yellow Not in flower Rich blue-pusple; local と teps charge ; in seed Woolly, white mate nixed

48

28 APRIL , 1982

4383	Sarcocopnos crassifolia	Middle Otlas	SW of	000 m.	Exposed moothand : fissures on aeolign rod
4384		4384) "	ain et Leuh	11	Pockets of leafsoil on top of acolian rock
4385	Narcissus 4384 A allum (with Umbelliferac	*	ŧ.	48	Shady places among stones
4386	anithogolum	11	43	8.0	In menning water.
4387	Liliarcae	4.	4.	٩.	Seafsoil among evergreen oaks
4388	Urginea	u.	)e	<b>#</b> 3	Exposed moorland; open sites
4389	Bellavalia		<b>8 9</b>	•1	
4390	Paemia corracea	•>	B1	5 <del>7</del>	Clearings in ceder forest.
4391	Polygonatum	**	84	**	Dense slade in cedar forest
4392	anthericium	11	81		Sight shade among everyteen oak
4393	Aristolochia lorga subsp. paucinervis	11	**	\$1	Story places on open slopes

4394	-Aarcusus Leucojum	6	Between	?50 m.	Crumbling setist slope with Lavandula
4395	? Sulla	ł) I	Khenifa & Köiba	**	() i
4396	Urginea	"		. <b>b</b> 1	ti -
4397	Romulea	n		٩t	**
4398	Scilla	n	۹,	•1	ia
4399	Convolvalus	15	a,	••	4
4400	Unithogolum	н	<b>a</b> 1	۰.	+#
44 0 1	Bellevalia	h	b)	۰.	83
4402	Sulla	14	8+	<b>t</b> ,	
4403	arisatum	<b>t</b> a - 1		æ i	
4404	Dipicadi	<b>1</b>	<b>8</b> 7	ê:	17
4405	Scilla		11	۹.	\$ }
4406	Biatum		**	h	<b>1</b>

hein rocks White; extremely local an rocks Not in flower

la stoechas

#### 29 APRIL, 1982

4407	Leucyum autumnale	630.201	Middle Ottlas	N. of	1200 m.	South-facing limestone slope.
4408	Scilla		84	Kar el-Ksiba	4.8	
4409	Muscaje		45	•13	<b>\$</b> 9	<b>#</b> 1
44 10	Diprodi		18	•	<b>a</b> 1	41
4411	Romulea		<b>†</b> #	<b>1</b> 4	4.6	đi.
4412	Narcissus bulbroodium		8:	<b>31</b>	n	ø 1
4413	Itis xiphim		14	11	• •	<b>()</b>
4414	Narcissus marineri		**	(Jizi . n. lit (luita) South of Kriba)	1700 m	N. facing slope in relict oak & cedar
4415	Crocus		n	Quina f		
4416	Anagallis monelli		11	South of Kuba I	1500 m.	Sunny, dry clay banks & tock crew
4417	Iris xiphium		()	2.3	92	Sunny, dry clay banks & rock creve Open alopes and among scrub
4418	Ophys atlantica		**	<b>P</b> 1	84	Moist clay loom among touf
4419	lphys tenthredinifera			**	14	
4420	brehis		th th	s n A	n -	Wet clay on open slope
4421	Romulea		15	41	14	2) I I N
4422	Colchicum		. 1	N Literation	2000 1997 <b>- 1</b> 99	н
4423	aceras		n	<b>8</b> 1	'n	Fight shade among scrub
	30 APRIL		· ·			
4424	Romulea		Middle Utlas	N of Ksiba	1200 m.	Leafmould-filled pockets on limit
4425			19 19	<b>Ne</b>	•	31
4426	<b>A</b>		<b>9</b>	<b>N</b>	**	<b>t</b> a
4427	Narcissus bulbocodium		, <b>N</b>	1	÷1	<b>b</b>
4428			<b>11</b>	: <b>t</b> ¢	**	· •
4429	Pteriolophyta		• • • • • • • • • • • • • • • • • • •		**	14 <b>15</b>
4489A			8 <b>3</b> € €	: <b>N</b>	11	**

cutt. JWB. Bull ~ not in flower 1. [possibly some as 427] Not in flower at association erices Grange-red; Ahully; 15. Blue-violet. Not in flower mestone Not in flower [possibly = 4412] Not in flower.

		Niddle Atlas	above Afourer	1000 m.	Exposed limestme slope; thin
4430	Campanula	**	V 14	74	1 1
4431	Lychnio	"	t 1	<b>A</b> s	11
4432	a (Composita	e) "	11	8 į	98
4433	Chypanthenium coronatium		41	*1	19
4434	(Segumino	sae) "	. et	et	45
4435	dimeria	11	n	H	t
4436	Linaria	h	N	ty.	**
4437	Convoluctus	"	n .	39	. 11
4438	Plantago	. 11	R p	41	n
4439	(Malva	Leve) "	ft	15	h
4440	Scrophularia		41	.,	n
444 1	Valeriana	11	ti	29	jt.
4442		15	u	tr	tr
4443	Amithogalum	13	n	L¢.	*
4444	Parcissus serotinus	11	٤ę	41	,1
4445	Concerned Storphilm	н	**	83	"
4446		i. It	+2	4.2 C	11
4447	Gynandrivio siszinchium	. \$\$	41	44	м
444.8	Cheilanthes	t t	Cabove Afouret	1500 m.	Steep North focing slope; among or
4449	Negarage .	1;	towards Bin-el.	**	
4450	Rassissus bulbocodium	\$7	Quidane dam	tr	•
4451	Crocus	: ty	ų	17	n
4452	lphys apifora	**	**	*4	
4453	Polygala	н	28	**	Dry, vertical rock crevices
4454	Geranium malviflorum	5	:	11	Cultivated com fields and marge
4455	Biatum	٩,	ŧ	81	Evergreen oak scrub ; among stored
4456	Ophrys tenthredinifera	13	, <b>Q</b>	41	(under scrub ; leafy soil over le
4457	" lutea		28	(1	- VV - 11

Eintr & white forms. Red pupple & yellow; 80 cm. argins Blue pupple; tuberous ones and Pround leaved; not in flows " luniestone }

-11

1 MAY, 1982

1458	Silone		Middle Otlas	Bull - Denmate road (508)	800 m.	[ Imestone hills with granite capp in reddich clay soils
1459		(Malvaceae) (Compositae)	n	tood (508)	4	[ in reddish clay sells
1460		(Compositae)	39	ti -	41	
461	Convolvulus		- 17	*	**	11
462		(Compositae) (Compositae) (Compositae)	. <b>4</b> 4	4	18	b
463		(Compositae)	12	43	<b>e</b> 1	h
464		(Compartae)	63	4	<b>et</b>	
465	Papaver		ti	tt	. 61	• • • •
1466	Linaria		)I	4	· • •	· · · · · ·
1467		(Leguminosae)	h	*1	· • •	
1468	Camponula			11	<b>t</b> •	h
469		(Labiatae)	\$1	n	ŧ1	13
14 70	Helianthemum		17	••	•	11
4471	Lavandula		H	<b>#1</b>	٤¢	**
4478	Echium		u	17	<b>t</b> t	n
4473	Stagenia	(Coppanidaceae)	**	45	ŧť	13
4474	Nigella		<b>t</b> i	<b>#</b> 1		11
4475	Papaver		н	24		. 13
4476	Reseda		<b>*</b> *	11	51	31
4477	Camponula		**	48	w	11
4478	Euphobia		17	**	**	Þ
4479	Roemeria	/	12		11	d
4480		(Casyophyllaceae)	11	L.	**	**
4481	Scotyoneta		11	N. of Demnate	900 m.	(Red sandatone hills : open dry
4482	Utyinea		þ	V 14	-41	Red sandatione hills; open, dry Association with Euphorbia resimple
4483	Bellevalia		. Az	s At	'at	4 1
4484	androcymbium		<b>t</b> )	et.	••	'n
4485	U	(Conpositae	24		18	h
4483A		(Utobanchaceae)	n	14	ta	13
-14-81A		(Conpusitae (Vfobanchaceae) (Siliaceae)	••	**	**	**
·		× /				

ing; {

Greenich white; opens in evenn Pinte ; annual fellow; annual. Pinte ; perennial Yellow; annual Deep yellow; annual. Geam; annual Pusple; annual Yellow; perennial Deep violet ; perennial Violet ; petennial, Gumson; shrubby perennial link; should perennial Ruple blue; shoubby. Red to violet; annual Pink; prostrate; perennual Greenish white ; annual Red Greenish white; annual Pale blue ; petermial annual Orange-red ; annual Pinke; annual. sites) Pinte era I Not in flower White from brownish buds. White. Spinig shub; yellow head Entire plant reddish; take Not in flower

1 MAY , 1982

			High	Ottlas			
448 <b>5</b>	Scotyonera		Ū	"	Below Ize n -	1000 m	Sandy soil at margins of conferous woodla
4487	Iris (xiphium) tingitana			4	Sichka	1	"
44 88	Gramineae			17	te	<b>t3</b>	n
44.89	Gynandisis stayinchum			*,	•	et et	p1
44.90	Scotzonera			**	4	11	31
4491	n			43	61		13
449R	Gagea			•	**	1500-	Creasing on north lange dills indicain
4493	Colchicum		High	Ottlas	Ini - n - Irchte	a 2200m	Crerices on north formy cliffs; volcanie In wet turf by stream; acid silt
4494-	Osnithogolum		J.	11	-9		chi wa surp vy straine, was sea
4495	Romulea			.,	4+	. •	**
4496	Otchidaceae			12	*	4	
4497	Ronunculus			¥	~	1)	
4498		(Craciferae	1	,,	<b>4</b> 1	ų .	Dry slopes of crumbling schiet.
44.99	Seucanthenum		,	,	44		in stopes of churching schuce .
4500	alyssum		•	•	\$2	t <u>ş</u>	
4501	8	(Boraginaciene)		10	4	ų.	v.
4502	Sarifraga granulata	(0		ł	<b>é 8</b> *	<b>1</b> 0.	"
4503	and a grant a	(Compositee)		1	1	<b>*</b> **	n in
4504	anthyllis		•	•	t0	11	**
4505	0.0	(Boraginaiceae)		1 E	**	<u>41</u>	<i>p</i> 1
4506		(Pteridophyta)	•		₿ û	41	**
4507	Reseda	(surrappyru)	•		**	t)	11
4508	Stachys		•			4	11
4509	Surveys	(Scrophulaniaceae)			12	£0	
4510	Fritellaria	( a croprista Hareaa)	**		13	1.0	H
4010	Omillatia		. 11		- 7	ê.ş	Among Bupleurum spinosum on steep gulle

side ; wet, disintegrated schiet.

voodland

Pale-pink; not tuberous Violet-blue.

Wielet Pinte, tuberous, toothed l ; linear be · 11 24 kanie rock Not in flower

; round tubers 11 Hellow; perennial Cream, perennial White rays; basally red. Yellow, perennial Blue; annual White ; perennual Discoid; shrubby perennie Purple-red Pale blue

Reddish, perennial White. Yellowsh . Darte makegany flowers.

gulley -

4511	Scilla hispanica		High Utlas	Alove Lin. n 7	<b>E</b> , 300 m.	Mainly moist or shaded sites on rocky slopes
451R	Colchicum		0	{ Hove Lig. n 7 Sichka	łt	
4513	Romulea		u.	К	N	11
4514	Narcissus wateri		ŧi		89	19
4515	Gogea		83	<b>\$</b> *	**	h
4516				ţs.	*1	N
4517	Fitellaria		11	16	2,500m.	Shady, tocky sites.
4518	Narcissus wateri		<b>8</b> 5	( Debel low Church	3,100 m.	Shady, rocky sites. Moist ground at edges of melting snow
4519	Narcissus water bulbacodium		11	Diebel hou Uninel above dig -n Jichkan	*	
4520	anthericum		<b>h</b>	. U h	• <b>\$</b>	<b>P</b>
4521	Colchicum ? tryphyllum			4+	1.2	<b>b1</b>
4522	? Merendeta		71	81	. 44	. रह
4523	Lat	(muniferae)	13	, N	R,500m	Rock crevices
4524	Sempervision atlanticum	V /	11	80	5 g (t)	11
4525	Narcissus bulbocodum		4	Lizi.n. Lichtea	2000 m.	In moist truf; clay loam.
4586	Romulea		<i>t</i> i	an Anna Anna Anna Anna Anna Anna Anna A	1.9	
4527	Oprithogalum	•	•	**	¥.	\$ <b>?</b>
4528	v	(Leguminosae)	) ti	ti -	10	Rocke cremies
4529	Silene	- /	Ħ	*1	**	14
4530	Yuga		18	<u>ş</u> t	13	Dryich, story sites
4531		(Compositae)	4	20	h	
4532	Salvia		· • •	**	4) 	,s <b>11</b>
4533	Anacyclus		is .	•	t) i i	88
4534		(Compositae)		41 (J. 1997)	n	•)
4535	(Leucanthemum)		*	h	1	**
4536	Cermthe			n n		Moist places near stream
4537	Bellis		. 11	t)	. <b>No</b>	ts
4538			<b>n</b>	••	. 11	n († 1997) 1997 - Norden († 1997)
4539	Urchis		n	ty in the second s	h	1) 1
4540	anthyllis		45	N.	43	Dryich story sites
4541	Esysmum ? bocconei		11	N	28	ч U п

y slopes

Bhe Not in flower Pale violet; white throat White yellour. yellow. Brownish purple White ms. Yellow. MS Not in flower MS ms 18 MS

Yellow . Very local ; not in flower main coll. (JCA) Yellow; selections (JWB) Sower altitude habitats (JCA) White; green stripe Yellow; caespitose White; perennial Yellow; Pink; sessile; perennal Violet; perennial 5 Lap woted ; prostrate ; havy 4 yellow; woody base Cream le purple White Pale · blue Red pupple Yellow

3 MAY, 1982 =

4542		(Cruciferae)	High Ottlas	Juji n. Juchka	2000m	Dryish story sites; volcanic rock
4543		$\begin{pmatrix} & \mathbf{v} \\ & \mathbf{v} \end{pmatrix}$	И	41		
4544	Astragalus		**	14	łł	,1
4545	Dyaba hispanica		Fa	0	41	
4546	Ujuga		ود	43	11	**
4547	Colchicium		н	41		
4548			13	11	11	: <b>H</b>
4549		( Compositae)	U	17	ų	**
4550		(Compositae) (deguminosae)	ŧį	**	\$\$ }	
4551		(° " )	ē N	**	11	h
4552		( " )	۴۰	• •	, 1	
4553		(Legummosae)	High atlas	(between Asni	1000-	(1000 Sut lains alance , story alow soil
4554	Lavandula		0 4	f and Moulay	1000m,	Open East foring slopes; story clay soil
4555	aphodelus		44	Brahm	··· ~	) red sandatone. Umory spasse scrub of d
4556		(Leguminissae)	*1	h	0	Ephedra, Ieucrium fruticano, Savandula Chamaeropo, etc.
4557	Unonio	<b>U</b>	te	11	Ϋ́Ο,	( commence ) etc.
4558		(Leguminosae)	Ť1	¥.	-0	1
4559	Lavandula	<b>U</b>	11	et :		**
4560	Shymus		47	t)	13	*1
4561	Helianthemum		<b>#1</b>	ц		13
4562		(Compositae)		**	11	- h
4563		(Leguminosae)	/1	es.	11	ч Ц
4564		(Leguminosae) (Compositae)	11	e ŝ	13	n.
4565	Helianthemum		11	45	41	н. Н
4566	Anagallis arvensis			14	12	h
4567	Matthiola		н	19	+1	N
4568	Convolvulus		**	ł <b>ę</b>	ł.	
4569		(Leguminosae)	**	٩Ē		h
4570		("")	**	ix.	4	a.
4571		( , , )	**	41	41 41	••
4572	Amagallis		tı	f.	h	la la
4573	ч	(Compositae)	N	e v	14	

day soils over ) net of Lygos, ndula spp.,

Yellow \* 11 Jellow; perennus Not in flower annual Shrufby; perenne Red-purple; perenn Yellow; annual Yellow; perennia Yellow Bhe Pinkish white yellow Pink & white Purple: Blue violet Reddich · puple Pink yellow & frouri ann yellow . Yellow. Yellow Blue; annual Cream; annual Pink; perennial Hellow; 1 m.; sco Yellow. Yellow Pinté; annual. 11.10 ...

4-74	Γ. P.		LL.ì A#	( Sectiveen		(IL N'HL		A 5 5 0	)	
4574 4575	Companula		High Otlas	Lani and Mouley Brelin	1000 m	(Habitat	as for	4253	m/	
4576		(Compositae)	"	( Internet of Comme	*			14		
4577	Salvia	( wither a						*1		
4578		(Labiatoe)	,,		h			**		
+579	Matthiola		"		*1			<del>1</del> 1		
-580	Melilotus		Pt		**			**		
1581		(Legummosae)	+ t		13			11		
7282	Linaria		4		•1			11		
1583		(Leguminssoe)		:	**			**		
1584	Plantago	-	18	-	••			11		
4585	P	(Rubiaceae)	ч		n			••		
4586	Cappanio spinisa		u.		-11			*1		
4587		(Caryophyllaceae)	•		**			. 1		
1588	Ophrys		11		F4			**		
1589	• •	(Compositae)	14		11			*1		
4590	Teucruim fruticions Dipcade servitinum		42		Ŋ			•		
4591	Dipcade serotinum		11		ka			\$1		
4592	Viola		48		11			t 1		
4593		(deguminosae)	11		**			u		
4594		(Leguminosae)	19		ŧ			**		
4595		(Rubraceae)	18					**		
4596		(leguminosae)	11		ti.			\$1		
1597	Scalvosa		40		21			45		
1598	Reseda	<b>.</b> .	H.		w			**		
599		(Botaginaciae)			tr			*1		
600	Unithogolum pyramidale	U Z	**		11	:		11		
-601	Reseda		t		l+			**		-
7602		(Jegiminosae)	-11		ti.			۲,		
<del>1</del> 603		$\langle \cdot \cdot \rangle$	44		٩	:		44		
604		( ")	11		u			łų –		
605	Rumex		16			•		13		
606	Gynandiiris sisyindum		19		6			11		

Blue.

Cream. White ; perennial

Ilae; annual yellow; annual Yellow, perennial Cream; annual heam.

-Pink Creamy white; scander Rinke. Yellow Reddhah; annual Blue; 1m. Change-brown. Bhush white Yellow. Jellow ; annual Reddish . Yellow. Reddish ; annual Greenish pink; annual

Yellowish; annual Red. purple. Pale yellow. Reddish; perennial Reddich yellow: annual Blue peuple.

4607 4608	Sygos monosperma Blesidophyta	ł	High atlas	Letween Asni & Moulay Bruhim	10,0 0 m	(Habitat as for 4553 on).
4609	Inis planifolia		24	n	•	n
4610	Romulea		11	14	*1	41
4611	Ophrys lutea		<b>1</b> 4	<b>f1</b>	"	**
4612	Gynandritio		15	te te	••	14
4613	Biotum		,1		NI.	11
46 14	Caralluma		ų <b>t</b>	te .	"	**
4615	Asphodelus		, <b>11</b>	₹	11	
4616	Scoryoneta ? religioza	882.800.	84	•	••	14
4617	Ilipcadi serotinim		"		4	89
4618	Convoluilus		<b>*</b> *	k r	81	4
4619			••	<b>t+</b>		**
4620	Colchicum triphyllum		High Ottlas	Dj. Qukaimedar	<b>2</b> 500 m	Scree and story soil at edge of me
4621	Narcissus wateri		- U - H	41 11	<b>2</b> 000 m	North & north west slopes; story clay
4622	Fritillaria		tı.	4	*1	Strictly confined to N. facing slopes;
4623	· ·	(Okhidoieae)	*1	ts	<b>\$</b> 9	
4624	artragalus ibrahimianus		11	t s	**	Open story stopes.
4625	Sempervium attenticum			below Qukameter	1800 m	Rock crevices.
4626	Leucanthemum		11	•1	4	Rock crevices. Stony north & north-west-facing slopes ": de
4627	Chagnaton helichysoides		87		ħ	<pre></pre>
4628	0 0	( Etendophyta)	•	. <b>t</b> i	**	ہ سلا ב ۲
4629		(Eteridophyta)	), ,,	¥1	41	11 <b>–</b> 11
4630	Umbelliferae			ła	h	19
4631	Cruciferae		: ••	۲ <u>۵</u>	81	" : unde
4632	Cruciferae Daphne laureola latifolia	- -	•	. J¢	<b>\$</b> 1	" : unde

White; 2m. ~ in dry cresices Out of flower. Not in flower; scarce Very local Itiolet; local Infrequent; not in fl Local Pale pink; annual Bright pink; tubasue amber; numerous Pinke Infrequent; greenish

f melting snow Lilae. pinke chay.

White ; numerous. pes; among stones Not in flower " " ; scarce , Pale yellow Scarce

lopes. dy crevices wet rocks wet rocks.

under overhangs. bases of boulders

Luberous; not in fl. White, Yellowish . green

4 MAY, 1988 .

T MAY, 1906 .			An an a			
Inania		High atta	Jobultkal massif:	<b>200</b> 0m	Upon shopes on volcanic rock ; story clays	•
		0	above Wemol	ts .		
		88	n -	41	11	
		*1	u	11	11	
Narcissus wateri		88	પ	٤٩	*1	
		**		*1		
•		**	ve	t)	N	
	(Umbelliferae)	**	11	ч	,,	
	(Leguminossie)	te te	N.	**	**	
Bellio		11	ų	**	11	
		**		**	<i>p</i>	
	(Corpositee)	**	n	41	13	
Salvia taraxacifolia		17	64	. 46	n	
Pterocephalus depressus		81	*			
1 1			(m		· · ·	
Lychnis		High atlas	Bellem	1000m	Volcanic rock crevices in Moulay Brahim	gonge
V		0_ 11	"	j. N	ald limestone outwoors below Moulay Brah	<b>m</b>
		h		en	1 0	
		n	11	••	4	
		4	te	**	14	
		. <b>N</b>	¥1	•	1 : in fesse	uies
U (1	Borginaciene)	4	¥ł.	81	t s	
(	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ų	. tj	42	\$ <del>\$</del>	
		11	41	••	. : in humus fille	d poch
Natcissus bulbocodum sub-p. pt	alcoy					
	Linania Campanula Convolvulus sabatus stlanticus Anagallis monelli Narcissius watieri Stachys villosa Valerianella Bellis Anagallis monelli Salvia taraxacifolia Pterocephalus depressus Lychnis Clematis cirklasa Verbascum Salvia Stachys villosa Unittogalum	Iniania Companula Convolvulus sebatius atlanticus Inagallio monelli Narcusivo watieri Stachyo villosa Valerianella (Innbelliferae) (Leguminosice) Bellio Inagallio monelli (Compositee) Salvia taraxacifolia Pterocephalus depressus Lychnis Clematis cirklasa Verbascum Solvia Stachyo villosa	Linanie High Utler Campanula Convoluulus sebatius atlanticus Inagallio monelli Narcussus watieri Stachys villosa Valerianella (Umbelliferae) (Leguminossie) Bellio Inagallio monelli (Corpositee) Salvia taraxacifolia Pterocephalus depressus Lychnis (Lematis cirklesa Uerbascum Solvia Stachys villosa Urivitogalum	Sabria taraxacifolia Sabria taraxacifolia Stachyo villosa Unagallio monelli Marcusio watieri Stachyo villosa (Undelliferae) (degumunosae) Sabria taraxacifolia Pterneephalus depressus Lyohnis Uentotis cinhesa Uentotis cinhesa (Lenotis	Inaria High Utlas Bekkal Marshif: 2000 m Componula convolues soluties attentices """"""""""""""""""""""""""""""""""""	linanie Hyfe Utlas Beerling 2000 m Upon slope on welanie rock ; story clays Componeta

1705

4657	Urginea noctiflora		High Otlas	[ digi Gourane	1,800m. d	In fissives of disintegrating, vertical sc
4658		(Leguminosae)	n	labore uningmy	••	11
4659	Romulea		11	ly .	12	5 <b>7</b>
4660	Scotymeta.		**	23	••	R *

clays

Yellow Not in flower Not in flower Brick - red. Not in flower; scarce White Pink. White Jellow; caespitose Pale blac . Bruk red. Pink & white Pink. Not in flower.

White ; perennial Cream. Yellow. White White White White & pupple Blue. us.filled poercers Not in flower. Burplish - pink; rare

schistose strata llot in flower; rave. Hellow; prostrate mat Not in flower ...

	5 MAY, 1988		U. R. M.	1 Colii Guinag		
4660A	Seilla		Fligh Unic	is Sizi Gourane above	1800 m	Itsines of disintegrating, vertical, schis
4661	Natasins		ŧt	( annymis	н	¥ 0.0
4661A	Bellevalia		LŦ		41	n
4662	Gladiolus		. 4	tt .	11	**
4663	Structure .	(Jiliaceae)	rt	42.	1)	e1
4664	Bellevalia		ч	¢,	11	н
4665	Mexendera filifolia		*1	ŧ.	**	11
4666	Orobanche		14	<u>k</u> e	tf	11
4667	Polygala		H		41	n
4668	, and and	(Filiacene)	ta.	ŧŧ	11	11
4669	Leucanthemum		11	. /\	1500m.	Crevices on cliffs of volcanic
4670	Nateisus		. 4	above	"	Crevices on cliffs of volcanie Limestone outerop : depauperate or
4671	Campanula		<b>b</b>	aningning	44	44 1 1 1
4672	Iris planifolia		: • • •		4.8	ч
4673			Et	11	41	(Habitat as for 4657 ~ 4668 (Habitat as for 4670 ~ 4671
4674	Guiga Narcissus		łi –	42	"	(Habitat as for 4670 ~ 467)
4675	Inis planifolia		41	h s	li,	()
				•	84	**
4676	Harrissus A			4 1	43	43
4677	Inis planufolia		12 24	ti	ti.	(Habitat as her 4669).
4678	Lavandula stoechas		ta	(Iafgakeht	1200m	(Habitat as for 4669). Silled outeropping limestone strata;
4679	Salvia taraxacífolia				1	"
4680	Companula 10 0 0 +			{ above Amyming	n	11
4681	apphrys lutea	10	• • >		14	th .
4682	Alliscese r	~ poss more than one	(asusa)	(1): Mun a	1000	Cumpling ashint - at a sline wind
4683.		~ poss more than one (Jeguminostae) (''')	₿¥.	digi Uwyla	1000 m	Crumbling schiet ; steep slopes wit
4684.		(")	<b>1</b> 1	Lietween ani		1
	· · · ·			land.		
			1	(amigning		
				:		

istose strata

Unt of flower 11 н \*# 11 ... Blue Blush white. Not in flower Rink Not in flower Blue Not in flower Bink; perennia Not in flower

i rock, overgrazed habitet



; heavily grazed.

with little soil

White Pintcish Pale blue Not in flower

Yellow; cushions White & pink

6 MAY , 1982

6 MAY , 1985	<u>í</u>	helpt N. al	IS_H at			
<u>А.,ы.</u>	(Amaryllidaciane)	Mayakech	Sidi bou	600 m	Granite capping on	schistose fulls
		••	Carrierie	t j		<b>1</b> 7
Ullium		11	<b>t 1</b>	4		44
(muplaced) lerte	unum on the tool, cooler cells					
Utobanche	·	ł	N ·	500m.	Dry, open stopes ;	crumbling schi
	(Compositae)	PL	**	łe	<b>y</b>	11
	( Fabratae )	tt	ŧ	ti		<b>\$1</b>
Arobanche		, N	"	15		"
	(Legummoscie)	н	H. C	* \$		ŧı
	( )	41	**	**		R .
()tobanche			**	64		U
Etoduin		41	h	*1		e1
	(Compositae)	n	4	v		4
Limonium		L1	ti	L1		11
	multiplaced (Leguminosae)	High atlas	HijiGourene	1500 m.	(Habitat as for <	1669)
	Caralluma Alluin (miplaced) Nerto Urobanche Chrobanche Chrobanche Chrobanche Erocluin	(Amaryllidaceae) Caralluma Alliim (mighaced) Centronnum - Hagher, coastrad (tobanche (Compositae) (tobanche (Legummoscie) ) Urobanche Eroduin Simonium	(Imargelidacease) Marrakech Carolluma alluin (miplaced) Centrument Highert, construct (rompositee) (tobanche (tobanch	Ultrier, N. of South of (Amargelidacase) Marrakech Sidi bou (aralluma Ultrin (miplaced) Mentanne Hayter, contract (tobanche (Compositee) (tobanche (Legummoscie) (tobanche (Legummoscie) (toposite) (topos	Untert, N. of South of (Imangelledacase) Marrakech Sidi Ivou (arabhuma (Ithim)	Ubriet, N. of South of (Umargelidaceae) Marrakech Sudi hou 600 m Grantte capping on Caralhuma """"""""""""""""""""""""""""""""""""

### 7 MAY , 1982

4699	Narcissus broussonetii		N.of Rabat	Jac de		Stabilised constal dures and in limest
4700	alluin		<b>v</b> 11	7 Sidi	•	es
4701	Narcissus serotinus		н	(Bourhaba	ti.	11
4708		(Liliaceae)	**	-, h	/1	n
4703	Umbilicus		81	· •	••	" ~ in cre
4704	lephrys		**	**	\$4	ţ)

chist I