

NRA-Anglian 237



NRA



*National Rivers Authority
Anglian Region*

RIVER STOUR (2), SUDBURY

Report of a River Corridor Survey carried out for the National Rivers Authority, Anglian Region, by A.M. Walker, 10th August 1989

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ENVIRONMENT AGENCY

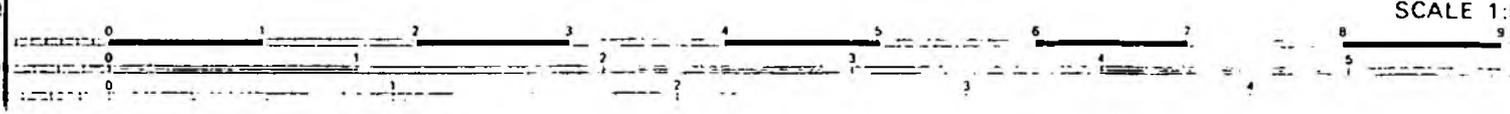


130692



Colchester
14 1/2 m or 9 miles
B 1508

45°



SCALE 1:50

RIVER STOUR (2), SUDBURY

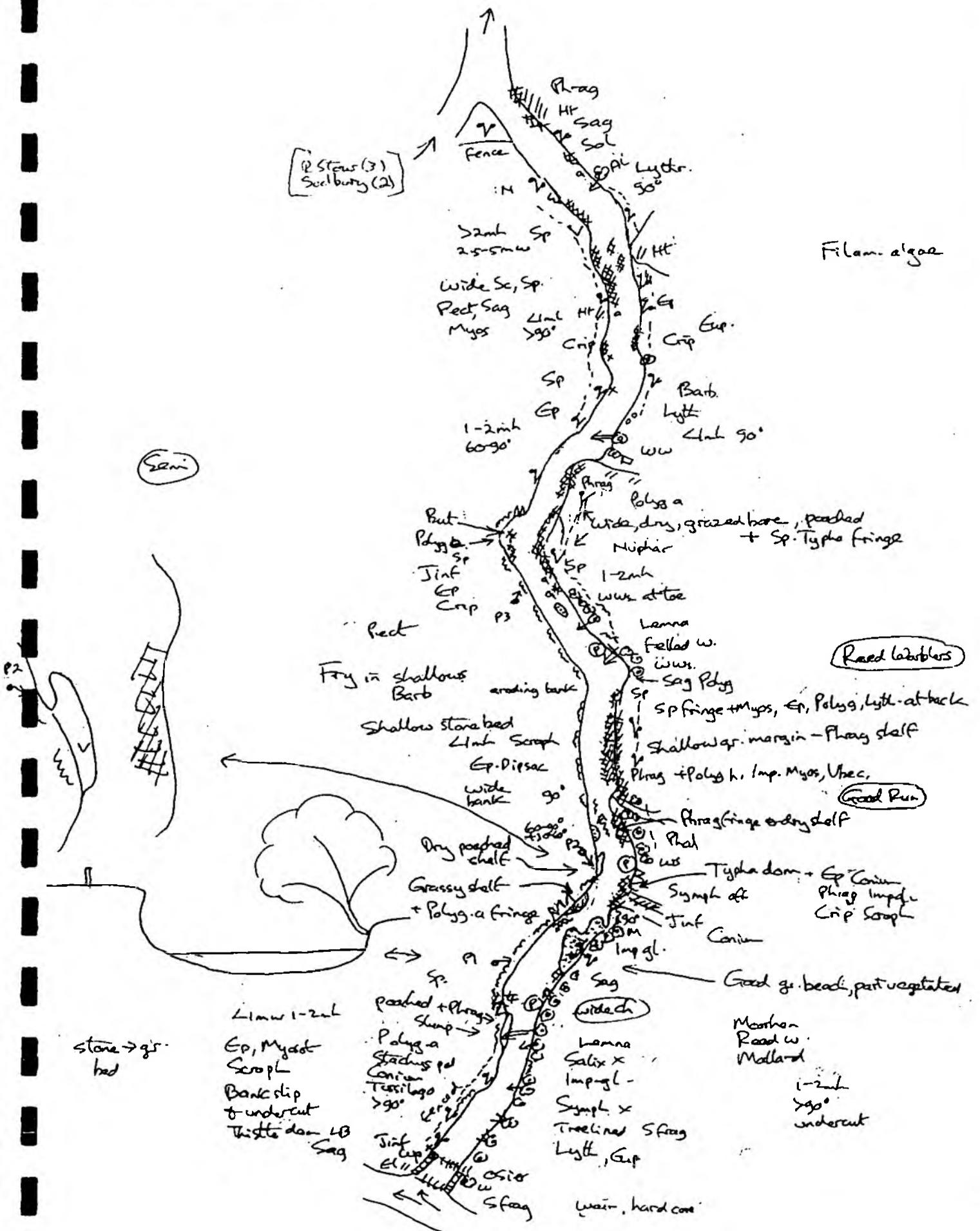
Location A length of river downstream of the weir at TL 868419 to the confluence with the mill channel at TL 866414.

Length affected 600m flowing through semi-improved and improved grassland.

Division and Personnel Tim Barritt from the North Essex District of the Eastern Area.

Maintenance Requirements Removal and redistribution of shoals of gravel.

R. Stour (2) Sudbury (1)



SURVEY SUMMARY

Adjacent Land

The semi-improved grassland of the common land on the left bank is not botanically species rich, but provides a better habitat for invertebrates such as grasshoppers than the improved grassland and arable fields on the right bank. There is an old meander on the right bank, but this is no longer wet and is marked only by a clump of willows.

Banks

The banks vary in height and profile, with shelves, small cliffs and shallow slopes. The most varied banks are in the upstream half, where there are moderate cliffs and several cattle-poached shelves, some with a mixed flora including Amphibious Bistort *Polygonum amphibium*, Water-pepper *Polygonum hydropiper* and Water Figwort *Scrophularia auriculata* in addition to ruderals and grasses. Elsewhere along the banks there are some good stands of Purple Loosestrife *Lythrum salicaria*, Gypsywort *Lycopus europaeus*, Water Chickweed *Myosoton aquaticum*, Reed Canary-grass *Phalaris arundinacea*, Policeman's Helmet *Impatiens glandulifera* and Hemp-agrimony *Eupatorium cannabinum*. There are several good beds of Common Reed *Phragmites australis*, notably on the right bank.

Some of the cliffs are partly vegetated, whereas others are actively eroding, particularly where the cattle are helping to break down the banks. There are several areas of active bank erosion and slumping: The most valuable cliffs are identified on the dredging map.

Tree cover is moderate on the right bank, with several Crack Willow *Salix fragilis*, White Willow *S. alba*, willow hybrids and Alder *Alnus glutinosa*. These trees overhang the river and provide shaded water for fish as well as low branches which are suitable as perches for fishing Kingfisher, or nest sites for Moorhen. On the left bank there is no cover, apart from a few planted saplings at the upstream end of the length.

Margins

There are good, shallow gravel margins, especially in the upstream half, valuable areas for invertebrates and small fish. A large gravel shoal/beach has formed on the right bank; this is partly vegetated, with Policeman's Helmet, Water-pepper and other wetland plants. The bare gravel is a good feeding site for birds such as wagtails.

Wide fringes of Branched Bur-reed *Sparganium erectum*, Reedmace *Typha latifolia* and Common Reed occur at several points along the section and there are a few good fringes of Greater Pond-sedge *Carex riparia*. Small amounts of Arrowhead *Sagittaria sagittifolia* and Flowering Rush *Butomus umbellatus* are also present along the margins.

Channel

The channel has a varied depth profile, with some good runs and riffles, stretches of deeper water and pools. The greatest variety of depth and channel width occurs in the upstream half of the section. This variety is of value to fish and aquatic invertebrates, providing a wide range of conditions and available habitats in a short length of river. The gravel runs and riffles are valuable spawning areas for certain species of fish and provide well oxygenated, fast-flowing water required for certain invertebrates. The slacker water/finer sediment conditions support a different community of invertebrates and plants and the deeper water is suitable for larger fish.

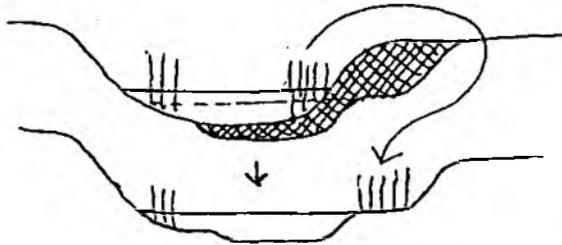
The aquatic flora is not rich but there is some Fennel Pondweed *Potamogeton pectinatus* and beds of Yellow Water-lily *Nuphar lutea*. Arrowhead and Flowering Rush occur in small amounts. At the downstream end there is a stand of Common Clubrush *Scirpus lacustris* which extends from the margin into the channel. These stands of vegetation are important for waterbirds and their young, as well as for aquatic invertebrates and fish.

RIVER STOUR (2), SUDBURY (1) - DREDGING RECOMMENDATIONS

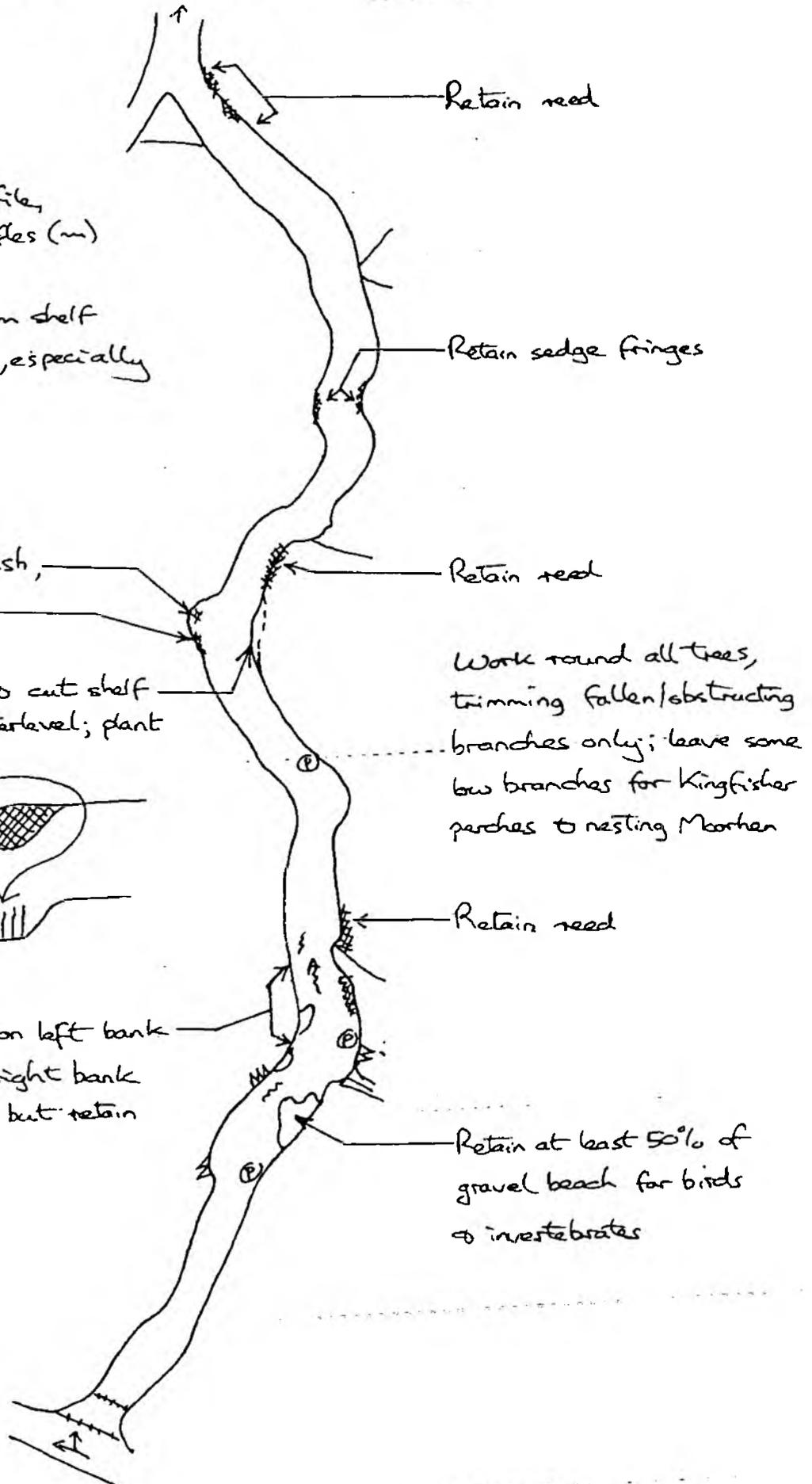
Retain or reinstate variety of bed profile, with runs (m) & riffles (m) & pools (P); leave banks untouched (apart from shelf enhancement below), especially cliffs (AA)

Retain Flowering Rush, Sedge & Rush

Trim right bank to cut shelf near to normal water level; plant reed spoil on shelf



Dry poached shelf on left bank & wide fringe on right bank could be trimmed, but retain gravel bed & run



Work round all trees, trimming fallen/obstructing branches only; leave some low branches for Kingfisher perches & nesting Moorhen

Retain reed

Retain at least 50% of gravel beach for birds & invertebrates

SECTION NO. R-2 Low @ Subing

DATES SURVEYED

10-8-89

SURVEYORS NAME

Amur

1	Aspla	adl	87	Ameop	are	173	Cellu	vul	260	Cicar	mac	347	Epipa	hel	436	Halia	por
2		ear	88	Anaca	pyr	174	Celth	pel	261	Cicho	int	348	Erico	cin	437	Hedar	hel
3		rut	89	Anaga	arv	175	Calys	<u>gvl</u>	262	Circ	x int	349		tet	438	Halia	nue
4		tri	90		tan	176		<u>sep</u>	263		lut	350	Erige	sce	439	Helle	foe
5		tri <u>qua</u>	91	Anchu	arv	177		<u>sl</u>	264	Cirsl	ace	351		can	440		vir
6		tri <u>tri</u>	92	Andro	pol	178		sol	(265)		arv	352	Erina	alp	441	Herac	sen
7		vir	93	Anemo	nee	179	Campa	glo	266		dis	353	Eriop	ang	442		spn
8	Athy	fil	94	Angai	syl	180		lat	267		ari	354		lat	443	Hespe	mat
9	Blach	spi	95	Antan	dio	181	rapunculo		268		hel	355		vag	444	Miera	agg
10	Botry	lun	96	Antha	arv	182		rot	269		pel	356	Erodi	cic	445		pil
11	Cater	off	97		cot	183		tra	(270)		vul	357	Eroph	var	446	Hippo	com
12	Crypt	cri	98	Antho	odo	184	Capse	bur	271	Clame	vlt	358	Eryng	mar	447	Hippo	rhe
13	Cysto	fra	99	Anthr	syl	185	Carda	ama	272	Clina	vul	359	Erysi	che	448	Hippo	vul
14	Dipna	alp	100	Anthy	vul	186		rie	273	Cochl	ang	360	Euony	aur	449	Molcu	lan
15	Dryop	aff	101	Aphen	arv	187		hir	274		dan	(361)	Eupat	can	450		mol
16		car	102		arv	188		iap	275		off	362	Eupho	aeo	451	Monke	pap
17		dil	103		mic	189		pra	276		off	363		exi	452	Horde	mur
18		fil	104	Aplue	gra	190	Carde	dra	277	Coalo	vir	364		hel	453		sec
19		ore	105		lnu	191	Cardu	aca	278	Colch	aut	365		lat	454	Mumul	lup
20	Equis	arv	106		nod	192		nut	(279)	Coniu	mac	366		peplus	455	Myaci	non
21		flu	107	Aquil	vul	193	Cerex	acuta	280	Conop	maj	367	Euphr	egg	456	Hydro	vul
22		hya	108	Arabi	the	194		acuti	281	Conva	maj	368	Fagus	syl	457	Myosc	nig
23		palust	109	Arabi	hir	195		are	282	Convo	arv	369	Fallo	con	458	Hyper	and
24		syl	110	Arcti	lap	196		bin	283	Cornu	san	370	Festu	aru	459		elo
25		tal	111		min	197		caroph	284	Coron	did	371		glg	460		hirsut
26		var	112		min <u>min</u>	198		cur	285		squ	372		ovine	461		hum
27	Gyano	dry	113		min <u>nam</u>	199		dam	286	Coryd	cia	373		pre	462		sec
28	Hupar	sal	114	Arena	sec	200		dia	287		lut	374		rubre	463		son
29	Myman	mil	115		ser	201		dio	288	Coryl	ave	375		viv	464		perfor
30	Isoat	lac	116	Arer	mar	202		distan	289	Coton	mic	376	Filig	ein	465		pul
31	Lycop	cia	117	Armor	rus	203		disticha	290		sie	377		vul	466		tet
32	Ophio	vul	118	Arrhe	ala	204		ech	(291)	Crata	oon	378	Filip	ulm	467	Hypoc	rad
33	Oraop	lim	119	Artam	abs	205		ala	292		lae	379		vul	468	Ilex	aqu
34	Oseun	rag	120		mar	206		ext	293	Crepi	bie	380	Foani	vul	(469)	Impet	gle
35	Phego	con	121		vul	207		flacce	294		cap	381	Fraga	ves	470		nol
36	Phyll	sco	122	Arue	mac	208		hir	295		pal	382	Frang	aln	471		per
37	Polyp	agg	123	Asper	cyn	209		hos	296		ves	383	Fraxi	exe	472	Inula	con
38		cam	124	Ast'nov	b	210		lae	297	Crypt	jap	384	Fueer	aur	473	Iris	foe
39		int	125		tri	211		las	298	Cyaca	mur	385		off	474		pse
40		vul	126	Astra	den	212		lep	299	Cynog	off	386	Galen	niv	475	Isale	set
41	Polys	acu	127		gly	213		mur <u>lam</u>	300	Cynos	cri	387	Galeo	bif	476	Jasio	oon
42		set	128	Atrip	gla	214		nig	301	Cytis	sco	388		spe	477	Junc	acuti
43	Pteri	aqu	129		lac	215		otr	302	Dacty	glo	389		tet	478		art
44	Salag	sel	130		lit	216		ove	303	Dacty	fuc	390		tat	479		buf
45	Abies	alb	131		pat	217		pal	304		inc	391	Galun	cil	480		bul
46		gre	132		pro	218		panicea	305		sec	392		per	481		bul
47		pro	133	Atrop	bel	219		panicula	306		prs	393	Callu	ape	482		bul
48	Acar	cam	134	Avana	fat	220		pan	307		pur	394		cru	483		conгло
49		ple	135	Avanu	pra	221		pil	308	Danth	dec	395		elo	484		eff
50		psa	136		pub	222		psa	309	Daphn	lau	396		mol	485		ger
51	Achil	nil	137	Balde	ran	223		pil	310	Daucu	car	397		mol	(486)		inflex
52		pta	138	Ballo	nig	224		ram	311	Oasch	cas	398		odorat	487		koc
53	Acino	arv	139	Barba	int	(225)		rip	312		fla	399		pal	488		ear
54	Aconi	nap	140		ver	(226)		rostra	313	Jesma	mar	400		pal	489		squ
55	Acoru	cal	(141)		vul	227		ser	314		rig	401		saxat	490		subnod
56	Adoxa	eos	142	Balli	per	228		spi	315	Digit	pur	402		ste	491		ten
57	Aegop	pod	143	Barba	vul	229		sylv	316	Diplo	eur	403		ull	492	Junip	com
58	Aescu	hip	144	Barul	era	230		ves	317		ten	404		ver	493	Kickx	ele
59	Aethu	cyn	145	Beta	arv	231	Carli	vul	(318)	Dipse	ful	405	Genia	ang	494	Kneut	arv
60	Agria	sup	146	Betul	pan	232	Carpi	bet	319		pil	406		tin	495	Koale	agg
61		pro	147		pub	233	Caeta	sat	320	Doron	per	407	Genti	ame	496	Labur	ana
62	Agros	can	148	Biden	cer	234	Catab	aqu	321	Draba	inc	408		cam	497	Lamia	gel
63		can	149		tri	235	Canta	oon	322	Droea	int	409	Geran	col	498	Laelu	alb
64		cap	150	Bleck	per	236		nig	323		rot	410		dis	499		amp
65		gig	151	Blyss	com	237		sca	324	Echlu	vul	411		end	500		hyb
66		sto	152	Brach	pin	238	Centa	ery	325	Eleoc	aci	412		luc	501		sec
67		vin	153		syl	239		pul	326		mul	413		moile	502		pur
68	Aira	car	154	Brass	nap	240	Cantr	rub	327		palust	414		phe	503	Lepza	com
69		pra	155		nig	241	Caras	arv	328		qui	415		pre	504	Larix	dec
70	Ajuga	rap	156		rap	242		dif	329		uni	416		pus	505		x eur
71	Alche	egg	157	Brize	med	243		font	330	Eleog	flu	417		pyr	506		kee
72		fil <u>fil</u>	158	Bromu	com	244		glo	331	Elode	can	418		robert	507	Lathr	squ
73		fil <u>ves</u>	159		are	245		sem	332		nut	419		sen	508	Lathy	mon
74		gle	160		hor <u>hor</u>	246		toa	333	Elymu	can	420		syl	509		pra
75		gen	161		tam	247	Chaan	ein	334		far	421	Geum	x int	510		syl
76	Alism	ple	162		ste	248	Chaar	tem	335		pyc	422		riv	511	Leena	gib
77	Allia	pet	163	Bryon	dlo	249	Chama	lam	336		rep	423		urb	(312)		minor
78	Alliu	ola	164	Buddl	dev	250	Chame	ang	337	Empet	nig	424	Glauc	fla	513		pol
79		sco	(165)	Butom	umb	251	Chell	maj	338	Epilo	bru	425	Glaux	mar	514		tri
80		urs	166	Cakil	mar	252	Cheno	alb	339		cil	426	Glech	had	515	Leont	eut
81		vin	167	Calam	can	253		bon	(340)		hir	427	Glyce	dec	516		nio
82	Ainue	glu	168		epi	254		mur	341		montan	428		flu	517		tar
83	Alope	suq	169	Calli	agg	255		rub	342		oba	429		max	518	Lepid	com
84		gan	170		ham	256	Chrys	seg	343		pal	430		x ped	519		het
85		myo	171		obt	257	Chrya	alt	344		par	431		pil	520		rud
86		pra	172		sta	258		opp	345		ros	432	Gnaph	syl	521	Lauca	vul
						259			346		tet	433		ull	522	Leymu	are
												434	Groen	den			
												435	Gyane	con			

323	LIGUS	OVN	612	ODONT	VER	694	POTAM	AID	701	RUMEX	***	860	SOLID	CAN	935	VALER	DIO
324	LILLU	MAE	613	ORONN	AQU	695	BET	ARI	702	ACE	869	669	916	936	VALER	OFF	
325	LILLU	MAE	616	CRO	CRO	696	CRI	CRI	703	ACETOSR	870	870	917	937	VALER	LOC	
326	LIMON	VUL	615	FA	FA	697	GR	CON	704	CON	871	871	918	938	VERDE	NIG	
327	LINER	DUR	616	JAC	JAC	698	LUC	HYD	705	CELESTOR	872	872	919	939	VERDE	THAO	
328	REP	REP	617	ORNOE	CAN	699	NET	NET	706	HYD	873	873	920	940	VERDE	OFF	
329	VUL	VUL	618	ORNOE	CAN	700	DBT	DBT	707	ION	874	874	921	941	VERON	QRT	
330	LINUM	CAT	619	ORNOE	VIC	701	DECLEN	DECLEN	708	ION	875	875	922	942	VERON	ANG	
331	LISTA	OVN	620	ORNOE	REP	702	PER	PER	709	ION	876	876	923	943	VERON	ANG	
332	LITHO	REV	621	ONOGO	ACA	703	DEL	DEL	790	RUCUR	ACU	877	877	924	944	VERON	ANG
333	LITTO	OFF	622	ONOGO	ACA	704	DUS	DUS	791	SAGL	***	878	878	925	945	VERON	ANG
334	LITTO	UNL	623	OPHTY	APL	705	POTEN	ANG	792	ION	879	879	926	946	VERON	ANG	
335	LOLLU	MUL	624	OFCHL	ENS	706	ANA	ANA	793	ION	880	880	927	947	VERON	ANG	
336	DEL	DEL	625	BOT	BOT	707	ARG	ARG	794	ION	881	881	928	948	VERON	ANG	
337	LONIC	PAR	626	ORIGU	VUL	708	ERECTA	ARG	795	ION	882	882	929	949	VERON	ANG	
338	LOTUS	COR	627	ORNIC	UMB	709	DEL	DEL	796	ION	883	883	930	950	VERON	ANG	
339	VUL	VUL	628	ORNIC	PAR	710	DEL	DEL	797	ION	884	884	931	951	VERON	ANG	
340	LUNAR	ANN	629	ORNIC	ACE	711	DEL	DEL	798	ION	885	885	932	952	VERON	ANG	
341	LUDIN	ARD	630	ORNIC	ACE	712	DEL	DEL	799	ION	886	886	933	953	VERON	ANG	
342	LUZUL	CAN	631	ORNIC	ACE	713	DEL	DEL	800	ION	887	887	934	954	VERON	ANG	
343	MUL	MUL	632	THO	THO	714	VUL	VUL	801	ION	888	888	935	955	VERON	ANG	
344	PIL	PIL	633	THO	THO	715	VUL	VUL	802	ION	889	889	936	956	VERON	ANG	
345	SYL	SYL	634	PEROP	RET	716	PERNA	VUL	803	ION	890	890	937	957	VERON	ANG	
346	LYCIN	FLO	635	PERLO	JUD	717	PERNU	VUL	804	ION	891	891	938	958	VERON	ANG	
347	LYCLO	DAR	636	PERLO	QUE	718	GERASU	DOM	805	ION	892	892	939	959	VERON	ANG	
348	CHL	CHL	637	PERNE	PAR	719	DOM	DOM	806	ION	893	893	940	960	VERON	ANG	
349	LYCOP	EUR	638	PEREL	SAC	720	LAURO	DOM	807	ION	894	894	941	961	VERON	ANG	
350	LYSIN	NEM	639	PEDIC	PAR	721	DAD	DAD	808	ION	895	895	942	962	VERON	ANG	
351	NUM	NUM	640	SYL	SYL	722	SDI	SDI	809	ION	896	896	943	963	VERON	ANG	
352	PUN	PUN	641	PENTA	SEM	723	PSEUD	MAN	810	ION	897	897	944	964	VERON	ANG	
353	VUL	VUL	642	PERNE	SIB	724	PUCCL	DIS	811	ION	898	898	945	965	VERON	ANG	
354	LYCNE	PAR	643	PERNE	SIB	725	PERNE	SIB	812	ION	899	899	946	966	VERON	ANG	
355	SAL	SAL	644	HYD	HYD	726	PUBLIC	DYS	813	ION	900	900	947	967	VERON	ANG	
356	HEPON	AQU	645	PHOLA	ARU	727	PULMO	OFF	814	ION	901	901	948	968	VERON	ANG	
357	MELUS	SYL	646	PHLAU	CAN	728	PHYOL	MIN	815	ION	902	902	949	969	VERON	ANG	
358	MELVA	MOS	647	PHLAU	ARE	729	PYRUS	DYT	816	ION	903	903	950	970	VERON	ANG	
359	NEG	NEG	648	PERA	PERA	730	QUERC	CER	817	ION	904	904	951	971	VERON	ANG	
360	SYL	SYL	649	PERA	PERA	731	QUERC	CER	818	ION	905	905	952	972	VERON	ANG	
361	MARTU	VUL	650	PERA	PERA	732	PERA	PERA	819	ION	906	906	953	973	VERON	ANG	
362	MARCI	MAR	651	PERA	PERA	733	PERA	PERA	820	ION	907	907	954	974	VERON	ANG	
363	REC	REC	652	PICOMA	DBI	734	RANUN	ACT	821	ION	908	908	955	975	VERON	ANG	
364	MECON	CAN	653	PICOMA	DBI	735	RANUN	ACT	822	ION	909	909	956	976	VERON	ANG	
365	MECON	CAN	654	PICOMA	DBI	736	RANUN	ACT	823	ION	910	910	957	977	VERON	ANG	
366	MEDIC	ARE	655	PICOMA	DBI	737	RANUN	ACT	824	ION	911	911	958	978	VERON	ANG	
367	LUP	LUP	656	PICOMA	DBI	738	RANUN	ACT	825	ION	912	912	959	979	VERON	ANG	
368	MELAN	PER	657	PICOMA	DBI	739	RANUN	ACT	826	ION	913	913	960	980	VERON	ANG	
369	MELIC	NUT	658	PICOMA	DBI	740	RANUN	ACT	827	ION	914	914	961	981	VERON	ANG	
370	UNL	UNL	659	PICOMA	DBI	741	RANUN	ACT	828	ION	915	915	962	982	VERON	ANG	
371	MELLI	SIB	660	PICOMA	DBI	742	RANUN	ACT	829	ION	916	916	963	983	VERON	ANG	
372	ALT	ALT	661	PICOMA	DBI	743	RANUN	ACT	830	ION	917	917	964	984	VERON	ANG	
373	OFF	OFF	662	PICOMA	DBI	744	RANUN	ACT	831	ION	918	918	965	985	VERON	ANG	
374	MENCH	AQU	663	PICOMA	DBI	745	RANUN	ACT	832	ION	919	919	966	986	VERON	ANG	
375	REV	REV	664	PICOMA	DBI	746	RANUN	ACT	833	ION	920	920	967	987	VERON	ANG	
376	X PLO	X PLO	665	PICOMA	DBI	747	RANUN	ACT	834	ION	921	921	968	988	VERON	ANG	
377	X VER	X VER	666	PICOMA	DBI	748	RANUN	ACT	835	ION	922	922	969	989	VERON	ANG	
378	X VIL	X VIL	667	PICOMA	DBI	749	RANUN	ACT	836	ION	923	923	970	990	VERON	ANG	
379	MENVA	TRI	668	PICOMA	DBI	750	RANUN	ACT	837	ION	924	924	971	991	VERON	ANG	
380	MERCU	PER	669	PICOMA	DBI	751	RANUN	ACT	838	ION	925	925	972	992	VERON	ANG	
381	MILLU	OFF	670	PICOMA	DBI	752	RANUN	ACT	839	ION	926	926	973	993	VERON	ANG	
382	MIMU	AGB	671	PICOMA	DBI	753	RANUN	ACT	840	ION	927	927	974	994	VERON	ANG	
383	MORNE	TRI	672	PICOMA	DBI	754	RANUN	ACT	841	ION	928	928	975	995	VERON	ANG	
384	MOLIN	CAN	673	PICOMA	DBI	755	RANUN	ACT	842	ION	929	929	976	996	VERON	ANG	
385	MORNE	FON	674	PICOMA	DBI	756	RANUN	ACT	843	ION	930	930	977	997	VERON	ANG	
386	PAR	PAR	675	PICOMA	DBI	757	RANUN	ACT	844	ION	931	931	978	998	VERON	ANG	
387	SIB	SIB	676	PICOMA	DBI	758	RANUN	ACT	845	ION	932	932	979	999	VERON	ANG	
388	MUCI	MUCI	677	PICOMA	DBI	759	RANUN	ACT	846	ION	933	933	980	1000	VERON	ANG	
389	MYOSO	REV	678	PICOMA	DBI	760	RANUN	ACT	847	ION	934	934	981	1001	VERON	ANG	
390	DIS	DIS	679	PICOMA	DBI	761	RANUN	ACT	848	ION	935	935	982	1002	VERON	ANG	
391	LAX	LAX	680	PICOMA	DBI	762	RANUN	ACT	849	ION	936	936	983	1003	VERON	ANG	
392	RAM	RAM	681	PICOMA	DBI	763	RANUN	ACT	850	ION	937	937	984	1004	VERON	ANG	
393	SCORE	SCORE	682	PICOMA	DBI	764	RANUN	ACT	851	ION	938	938	985	1005	VERON	ANG	
394	SAC	SAC	683	PICOMA	DBI	765	RANUN	ACT	852	ION	939	939	986	1006	VERON	ANG	
395	SYL	SYL	684	PICOMA	DBI	766	RANUN	ACT	853	ION	940	940	987	1007	VERON	ANG	
396	MYOSO	REV	685	PICOMA	DBI	767	RANUN	ACT	854	ION	941	941	988	1008	VERON	ANG	
397	MYCIC	QAL	686	PICOMA	DBI	768	RANUN	ACT	855	ION	942	942	989	1009	VERON	ANG	
398	MYCIC	QAL	687	PICOMA	DBI	769	RANUN	ACT	856	ION	943	943	990	1010	VERON	ANG	
399	MYCIC	QAL	688	PICOMA	DBI	770	RANUN	ACT	857	ION	944	944	991	1011	VERON	ANG	
400	MYCIN	ODA	689	PICOMA	DBI	771	RANUN	ACT	858	ION	945	945	992	1012	VERON	ANG	
401	MARCI	PAR	690	PICOMA	DBI	772	RANUN	ACT	859	ION	946	946	993	1013	VERON	ANG	
402	MARCU	STR	691	PICOMA	DBI	773	RANUN	ACT	860	ION	947	947	994	1014	VERON	ANG	
403	MARCU	STR	692	PICOMA	DBI	774	RANUN	ACT	861	ION	948	948	995	1015	VERON	ANG	
404	MARCU	STR	693	PICOMA	DBI	775	RANUN	ACT	862	ION	949	949	996	1016	VERON	ANG	
405	MARCU	STR	694	PICOMA	DBI	776	RANUN	ACT	863	ION	950	950	997	1017	VERON	ANG	
406	MARCU	STR	695	PICOMA	DBI	777	RANUN	ACT	864	ION	951	951	998	1018	VERON	ANG	
407	MARCU	STR	696	PICOMA	DBI	778	RANUN	ACT	865	ION	952	952	999	1019	VERON	ANG	
408	MARCU	STR	697	PICOMA	DBI	779	RANUN	ACT	866	ION	953	953	1000	1020	VERON	ANG	
409	MARCU	STR	698	PICOMA	DBI	780	RANUN	ACT	867	ION	954	954	1001	1021	VERON	ANG	
410	MARCU	STR	699	PICOMA	DBI	781	RANUN	ACT	868	ION	955	955	1002	1022	VERON	ANG	
411	MARCU	STR	700	PICOMA	DBI	782	RANUN	ACT	869	ION	956	956	1003	1023	VERON	ANG	