

ANALYTICAL TABLE

Astragali of British Columbia

SPECIES	ROOT	STEM				LEAF		FLOWER					FRUIT												
		Ht. in cm.	Habit	Stipules	Pubescence	Pairs of leaflet	Shape	Pubescence, etc.	Color	W	Y	P	Raceme	No. of fls.	Ped. lvs.	Calyx teeth	Calyx	Corolla	Cells	Sectn.	Pubesc.	Remarks			
																							1	2	Fl.
<i>A. aboriginorum</i>	ORIG.	30	erect, sparingly branched striate	ovate, acute, connate, somewhat larger below		5±	oblong-lanceolate, somewhat obtuse, attenuate at the base ±2.5 cm. long	downy-pubescent above and below	✓				erect, lax	15-20	2	equalling tube	black pilose	white with purple tinge, keel deep purple	+		+	pubescent when young glabrous in age	membranous, obscurely reticulate below 2.5-4.0 cm. long	2	
<i>adsurgens</i>	ORIG.	10-45	ascending or prostrate elong	ovate, acuminate membranous		8-12	oblong (obtuse)	± glabrous	✓			oblong cylind. - rotund first, dense erect	>	>	½ tube	long-campan	Vexillum subequal to wings		2	Δ	(appressed)	ovoid subcoriaceous short-beaked 15 mm. long	S		
<i>alpicola</i>	ORIG.	7	Depressed acaulescent			4-6	oblong or elliptic obtuse or acutish 5-8 mm. long	white silky strigose	✓			Sub-cap	3-8	>	subulate ½-⅓ tube	black-hairy	15 mm. long, wings broad, broadly emarginate		+						
<i>alpinus</i>	ORIG.	5-40	acaulescent procumbent	(ovate foliaceous)	(smooth or slightly hairy)	(6-12)	oval or elliptic obtuse or retuse 6-12 mm. long		✓			(Sub-cap) Fls. lax, pendulous	(few)	>		(black pubesc.)			✓	Δ	(densely black pubesc.)	narrowly oblong, acute at both ends (membranous)	>		
<i>Beckwithii</i>	ORIG.		low spreading		± glabrous		broadly oval		✓			short								Δ		ovoid, subincurved apiculate, broadly compressed (obcomp?)			
<i>Bourgovii</i>	ORIG.	woody caudex	Short numerous decumbent or ascending	Present on upper leaves connate scarious	(thin strigose)	7-8	2 lanceolate, acute lobes elliptical or lanceolate linear	(Sparse appressed hairs above and below)	✓			Short (lax)	5-10	much	>	stout	black strigose	(9-10 mm long) Carina apex inflexed & subproduced	✓			immature black to ashy pubescent	ovate lanceolate (immature) (oblong, ±obcompressed)	<	
<i>campestris</i>	ORIG.		adurgent petioles 2 flat, rigid	triangular acuminate lower membranous	Ashy strigulose becoming glabrate	4-6	lanceolate-linear or linear-subulate - usually acute - upper petiole reduced to phyllodes		✓				5-10	(>)	½ tube	hirsute - some black hairs	10 mm. long. Keel apex inflexed & produced into a long narrow falcate beak			Δ		puberulous	oblong linear turgid (2.5-3.0 cm. long)	S	
<i>canadensis</i>	ORIG.		Spreading					subvillous															micronate, subcylindrical		
<i>collinus</i>	ORIG.	(Stout 7)	erect or spreading rotund-striate	Small, oblong acuminate subfoliaceous	Pilose	9-11	linear-obtuse base shortly attenuate obtuse to retuse (7-15 mm. long)	Pilose beneath (glabrate above)	✓			oblong, densely flowered (5-10 cm.)			2	subulate ⅓ tube	oblong, base subgibbous		✓			pubescent	linear deflexed submembranous	>	
<i>debilis</i>	ORIG.		decumbent stem slender	Triangular-oblong acuminate slightly adnate to the base of the petiole	± pubescent	8-11	conceals-oblong apex truncate or emarginate - petiolulate	Minutely hirsute with appressed hairs beneath. Lower leaves glabrous				capitate	10-15	>	subulate subequal to tube	pubescent with grayish hairs	Vexillum deeply emarginate					canescent puberulous	broadly linear straight to falcate 1-1.5 cm. long		
<i>decumbens</i>	ORIG.		spreading to ascending Petioles flat			3-6	linear lanceolate acute		✓						attenuate slightly shorter than tube		8-9 mm. Keel apex slightly inflexed					(hairy)	(linear-oblong) (2 cm. long)	S	
<i>flexuosus</i>	ORIG.		decumbent, flexuous, sparsely branched	small, acuminate from a wide base lower connate		6-9	linear-oblong obtuse	glabrous above appressed pilose beneath				elongated lax			>		fragrant		✓				cylindrical straight acute coriaceous	S	
<i>frigidus</i>	ORIG.		30-60	ovate-oblong membranaceous		7-9	ovate-oblong to elliptic-oblong (obtuse 2-4 cm. long)	green ± smooth	✓			(loose)			=	short			✓			black hairy glabrous in America	oblong, attenuate acute at both ends (1.5-2.0 cm. long)	> or =	
<i>Gibbsii</i>	ORIG.	7	erect? herbaceous fistul. flex. simple or branching striate	foliaceous, triangular acute Adnate to lowermost base of petiole Upper: ovate	Canescent short-villous	8-10	obcordate cuneate upper leaves with retuse leaflets 10-25 mm. long rarely 12 mm. wide	minutely villous above and below Petiole 5.0 mm.				flowers nodding	15-20	2	½ tube	dense creamy-white pubescent	2.5 cm. long; bracts ovate, acute = pedicels Keel very obtuse				Δ		pubescent	Upper suture thickened young (mature) 12 mm	½
<i>glabriusculis</i>	ORIG.				glabrous, or with scattered short hairs		linear-lanceolate subacute, or oblong & obtuse at both ends	green								4 mm. long						very glabrous	lanceolate, attenuate, subfalcate 2.5 cm. long	3	
<i>glareosus</i>	ORIG.		short 12-5	oblong-acuminate membranous	densely woolly tomentose	6	linear-oblong	whitish from woolly pubescence	✓			Flowers in April-May	3-4	>		elongated cylindrical black hairy								(obcompressed coriaceous)	
<i>gracilis</i>	ORIG.		60±	Slender & erect Angular but scarcely striate	ovate-acuminate	6-10	oblong-linear remote	Lvs. subsessile				loose subsecund			>	minute	pubescent	14-16 mm. long	✓		±		very short, nodding elliptic ovate, acuminate with the curved style		
<i>Hallii</i>	ORIG.		30	adurgent	subulate	9-12	narrowly oblong subcuneate retuse 8-14 mm. long elliptic-oblong					Dense capitate or open	20+	>	broad ½-⅓ tube	2 mm. long, campanulate, base gibbous black pubesc.					Δ	✓	very glabrous	oblong straight apiculate	½
<i>hypoglottis</i>	ORIG.		15-60	Spreading procumbent slender	ovate lanceolate acute	8-12	obtusate or retuse	Sparsely pilose to glabrate	✓			Dense, capitate, flowers erect			>	equalling tube	black pubesc.	10-12 mm. long	✓		Δ	very hirsute	ovate one-seeded erect, appearing capitate (leathery - Engler & Prantl)	<	
" var. β	ORIG.			luscious foliaceous elongated				AS ABOVE, WITH EXCEPTION OF NOTED DETAILS								pale							4-8 seeded		
<i>lentiginosus</i>	ORIG.		(5-20)	Prostrate	Small, ovate acute	8 (5-8)	obovate (obcordate to oblong)		?			(oblong crowded)			<				✓		Δ	very glabrous	ovate, membranous acuminate, base curved (often mottled, 8-12 mm.)	<	
<i>lotiflorus</i>	ORIG.		25-75	short, spreading	ovate acuminate (3-4 mm.)	6± (3-7)	oblong, obtuse (or mucronate 10-16 mm.)	± long-petiolate, remote	✓			lax, capitate	3-4	Slend	<	exceeding tube	Campanulate white pilose	Small	✓		Δ	white pilose	ovate, erect, acuminate upper suture straight, lower arcuate (coriaceous)	(S)	
<i>Lyllii</i>	ORIG.		(30)			(9-12)	(lanceolate to oblong-linear 6-12 mm. long)					elongated lax frid.			Short	equalling tube (villous)	Small 6 mm. long	✓				Gray (hoary)	(ovate) (deeply sulcate)	(S)	
<i>Macounii</i>	ORIG.	7	50-60	not very stout, leafy, slightly striate	ovate-lanceolate free	4-8	oblong, obtuse above oval below 15-25 mm. long	glabrous above, sparingly strigose beneath lvs. 5-10 cm. long	✓			4-10 cm.	10-15	linear-subulate ¼ tube	4 mm. long	8 mm. long		✓		Δ	black hairy	Acute at both ends membranous, inflexed dorsally stipe + ped = 2 cm.	2-3		
<i>microcystis</i>	ORIG.			Procumbent woody	Slender branching Scarious almost free	4-6	oblong to oblong-lanceolate obtuse		✓			Slender	5-12		setaceous subulate, equalling tube	Short-campanulate pilose	Vexillum deeply emarginate, wings incurved and slightly longer than keel.	✓				Grey pubes.	globose-ovate, thin membranous, neither suture at all introflexed		
<i>Mortoni</i>	ORIG.		45-60	erect	membranous, broad, sheathing and attached to the stem	6-8	oblong to oblong-elliptic (obtuse) (12-24 mm. long)		✓			5-7 cm. crowded, nodding fls. ± sessile			=	short acute (shorter than tube)	nearly smooth	not much expanded slightly exceeding keel	✓		Δ	villous	(elliptic or oblong, erect, obtuse)	S	
<i>multiflorus</i>	ORIG.		up to 45	branching, adurgent to spreading	upper & lower connate (broadly ovate)	6-10	narrowly oblong or linear obtuse and mucronate		✓			lax frid.	many	Short	<	(shorter than tube)	keel straightish wings shortly obtuse	✓				Smooth	oblong chartaceous 12 mm. long	(or >)	
<i>Palliseri</i>	ORIG.		30 or over	slender rigid branching adurgent	Upper: stem-like separate	4-9	linear to lanceolate obtusish, rigid	(Sparingly strigose below glabrate above)	✓			Sparse	7-12	=	½ tube	(strigose)	Keel inflexed, tip narrowed & produced into a beak					very glabrous	linear (tapering at both ends) 1.5-2 cm long-2 mm. wide	<	
<i>pauciflorus</i>	ORIG.		15-30	deep, woody, subfusiform with a divided apex	many stems, branching, decumbent to prostrate below slender, straight	3-5	oblong or linear-oblong rarely elliptical, acute 6-8 mm. long	short white appressed-pilose	✓			lax, open	2-4	just	>	exceeding the tube, subulate	Short-campanulate villous, pile white appressed	Wings & keel whitish at base obtuse below	✓				ovary silky	ovary oblong (10 mm. long linear oblong)	
<i>Purshii</i>	ORIG.	7		short, spreading	lanceolate acuminate	6-8	oblong	very woolly	✓			lax, capitate, open			Subulate, equalling tube	elongated, membranous cylindrical	wings attenuate sub-equal to vexillum. Vex. ovate, bidentate, wings long. Keel purple-tipped forolla 3-4 cm. long.					ovary linear subsessile very pilose	(± arcuate coriaceous)		
<i>Robbinsii</i>	ORIG.		30	erect slender		7-11	elliptical often notched		✓			loose 2-sided in fruit			much	>		10 mm. long	✓			Smooth	oblong, boat-shaped, obtuse papery & veiny hanging stalked in calyx 1.5-18 mm. long	<	
<i>serotinus</i>	ORIG.		20-45	adurgent		4-10	linear		✓			virgate	9-20		¼-⅓ tube	carina apex short & somewhat narrow & inflexed							linear, becoming glabrous.		
<i>speirocarpus var. falciformis</i>	ORIG.		15			4-9	oblong retuse	ashy in colour				few frid.			¼ tube	barely puberulent							glabrate	falcate or hooked	>
<i>stenophyllus</i>	ORIG.		30 or over	erect, stout, striate scarcely angular	small, ovate, rather obtuse	4-7	linear, remote (8-15 mm. long 1-2 mm. wide)	slightly hirsute beneath	✓			oblong loose short	10		much	obtusate ⅓ tube	pubesc. with blackish hairs	12 mm. long					ovary glabrous		(>)