

Table S3. Comparison of features of *V. pubifolia*, *V. epipsila*, *V. palustris*, interspecific hybrid (*V. epipsila* × *V. palustris*) based on selected European floras and publications.

Feature		<i>V. epipsila</i>	<i>V. palustris</i>	Hybrid F <sub>1</sub> ( <i>V. epipsila</i> × <i>V. palustris</i> )	<i>V. pubifolia</i>
<b>leaf</b>					
- length/width ratio		0.51–1.50 (f, h)	<b>0.54–1.17</b> (f, h)	0.62–1.36 (f, h)	<b>0.58–0.87</b> (f)
- pubescence of the lower surface	hairy	+ (a, b, c, f, g, h)	+ (b, g)	+ (f, h)	+ (f, i)
	glabrous		+ (a, b, f, g, h, c)	+ (f, h)	
- shape of apex	acute	+ (b, f, h)	+ (a, b, h)	+ (h)	
	subacute	+ (b, g, h)	+ (b, h)	+ (f, h)	
	rounded or obtuse	+ ( <b>b, g, h</b> )	+ (a, b, c, f, g, h)	+ (f, h)	+ (f, i)
- type of margin	serrate	+ (f)			
	crenate	+ (b, g, h)	+ (a, b, f, g, h)	+ (f, h)	+ (f, i)
<b>flower</b>					
- length of CH sepals with calycine appendages (mm)		4.5–8.0 (f, g, h)	<b>3.5–7.0</b> (f, g, h)	4.0–7.5 (f, h)	<b>3.5–5.0</b> (f)
- length of CH spur (mm)		2.5–3.5 (g, f)	<b>0.5–1.5</b> (f, g)	1.0–3.0 (f)	<b>1.0–1.5</b> (f)
- length of CH lower petal with spur (mm)		12–23 (f, g, h)	<b>8–14</b> (f, g, h)	10–16 (f, h)	<b>9–12</b> (f)
- location of the bracts on the pedicel	ratio of distance of bracts from rhizome to length of pedicel	0.50–0.93 (f, h)	<b>0.20–0.60</b> (f, h)	0.32–0.70 (f, h)	<b>0.31–0.66</b> (f)
	in the lower half of the pedicel		+ (b, c, g)		
	in the middle of the pedicel or slightly above		+ (b, c)		+ (i)
	in the upper half of the pedicel	+ (a, b, c, g)			+ (i)
- pubescence of CH lateral petals	hairy	+ (b, f, h)	+ (f, g, h)	+ (f, h)	+ (f, i)
	glabrous	+ (b, f, g, h)	+ (g)		
- pubescence of pedicel	hairy (scattered hairs)	+ (g, i)	+ (g, i)	+ (i)	+ (i)
	glabrous	+ (g, i)	+ (g, i)	+ (i)	+ (i)
- pubescence of petiole	hairy (scattered hairs)	+ (g, i)	+ (g, i)	+ (i)	+ (i)
	glabrous	+ (g, i)	+ (c, g, i)	+ (i)	+ (i)
<b>karyology and embryology</b>					
- chromosome number (2n) /ploidy level (x)		24/4x (d, g)	<b>48/8x</b> (d, g)	36/6x (d)	<b>48/8x</b> (d)
- fruits (capsules) filled with seeds (fully fertile); female line development regular		+ (d, e, h, i)	+ (d, e, h, i)		+ (e, i)
- lack of fruits (fully sterile) female line development disturbed				+ (d, e, h, i)	
- pollen viability (stainability)	viable (80–100 %); male meiosis regular	+ (e, i)	+ (e, i)		+ (e, i)
	0–30% viable pollen grains, male meiosis disturbed, pollen grains cytologically differentiated			+ (e, i)	

a – Hegi 1925 [23]; b – Zabłocki 1947 [63]; c – Valentine et al. 1968 [26]; d – Kuta 1989a [8]; e – Kuta 1989b [9]; f – Kuta 1991 [10]; g – Karlsson and Marcussen 2010 and references therein [17]; h – Żabicka et al. 2020 [30]; i – Żabicka personal observations in the nature and in cultivation. CH – chasmogamous flowers.