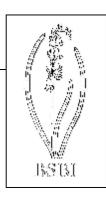
## **Plant Crib**



## GEUM RIVALE / G. URBANUM / G. 'INTERMEDIUM

Fully fertile hybrid swarms occur regularly where the parents meet and hybrids can show every form between the two parents. Whilst there is no difficulty distinguishing the parents, distinguishing back-crossed hybrids from the pure species is another matter, especially as introgression seems to occur more readily with *G. rivale*. Plants differing from either parent by 3 or more characters in the Table (from Walden *et al.* 1987) can safely be recorded as hybrids.

	Geum urbanum L.	Geum× intermedium Ehrh.	Geum rivale L.
Petal ground colour	Lemon yellow	Pale lemon	Cream / salmon
Petal venation	Nil	Weak	Strong
Petal apex	Entire	Emarginate	Retuse apex
Petal claw	Absent	Short	Long
Petals	Less than 7 × 5 mm	7-10 × 5-9 mm	More than $10 \times 9 \text{ mm}$
Calyx colour	Green	Either green with some purple, or purple with some green	Purple
Calyx angle	Reflexed	Flat	Right-angled
Flower angle	Erect	Intermediate	Pendulous
Petal attitude	Spreading	Part spreading	Campanulate
Pedicel colour	Green	Mixed (note 1)	Purple
Stipules	More than 18 × 18 mm	12-18 × 10-18 mm	Less than 12 × 10 mm

References Taylor, K. (1997). Journal of Ecology 85: 705-731.

Waldren, S., Davies, M. S. & Etherington, J. R. (1987). *New Phytologist* **106**: 679-688. Waldren, S., Etherington, J. R. & Davies, M. S. (1989). *Botanical Journal of the Linnean Society* **101**: 199-211.