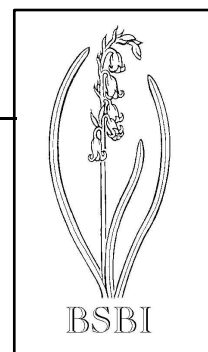


Plant Crib



GYMNADENIA CONOPSEA

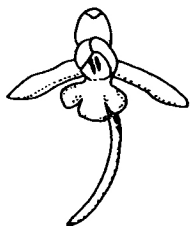
Three infraspecific taxa may be recognised within *G. conopsea* (L.) R. Br. (these may merit specific rank). The best characters are the shape and proportions of the labellum, the side lobes of the labellum (not easy to quantify) and the lateral sepals.

Subsp. *conopsea* is found in dry lowland calcareous grassland on chalk, Oolite and Magnesian limestone northwards to Durham. Subsp. *densiflora* (Wahlenb.) E. G. Camus, Bergon & A. Camus occurs in calcareous fens (and also north facing chalk grassland) W to Somerset and Devon and N to Anglesey and Westmorland. Subsp. *borealis* (Druce) F. Rose is the predominant taxon in the N and W where it grows in relatively lime-poor hill pastures, but it also occurs in the New and Ashdown Forests on marl bogs. Hybrid swarms (showing hybrid vigour) have been found between neighbouring populations of subsp. *conopsea* and of subsp. *densiflora*.

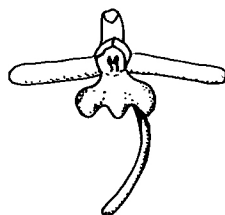
	Subsp. <i>conopsea</i>	Subsp. <i>densiflora</i>	Subsp. <i>borealis</i>
Labellum width	(4.5-)5.5-6.5(-7) mm, without shoulders	(5.5-)6.5-7(-8) mm, with distinct shoulders	(3-)3.5-4(-5) mm, narrow
Labellum length	(4-)5-6(-6.5) mm	(3-)3.5-4(-4.5) mm	(3.5-)4-4.5(-5) mm
Max. width across floret	(7-)10-11(-13) mm	(10-)11-13(-14.5) mm	(7-)8-10(-12) mm
Spur length	(11-)12-14(-17) mm	(13-)14-16(-17) mm	(8-)11-14(-15) mm
Lateral sepals	Linear, pointed at tip, deflexed at <i>c.</i> 30°, <i>c.</i> 1 mm wide × 5-6 mm long	Linear, truncate at tip, held horizontally, <i>c.</i> 1 mm wide × 6-7 mm long	Oval-lanceolate, pointed, deflexed, <i>c.</i> 2 mm wide × 4-5 mm long
Fragrance	Sweet but with an acid "rancid" background	Very sweet (like carnations), no "rancid" background	Very sweet
Height	Normally 20-40 cm, can be more	Normally 30-60 cm, but less in dry chalk grassland	Normally 15-25 cm, rarely more
Flowering time	Early June - mid July	Early July - August	Late June - late July

Plant Crib

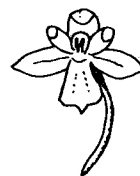
Measurements are ranges (extremes in brackets) normally found in a population. Vegetative characters (height, leaves, etc.) are very plastic and variable, as is the inflorescence density.



a



b



c

Florets of (a) subsp. *conopsea*, (b) subsp. *densiflora*, (c) subsp. *borealis*.

Author F. Rose, March 1988.