COELOGLOSSUM VIRIDE X ORCHIS FUCHSII ON THE WILTSHIRE DOWNS

By J. D. Grose.

In June 1946 an Orchicoeloglossum was gathered on Bishopstone Downs, North Wilts, v.-c. 7, by Mrs M. le F. Shepherd, and submitted in a fresh state to Mr H. W. Pugsley, who identified it as Coeloglossum viride (L.) Hartm. x Orchis Fuchsii Druce. A few days later a second specimen was found by Mrs J. D. Grose on the Wansdyke near Horton Down, North Wilts, v.-c. 7. This was a larger, more robust plant, but agreed in all essential characters with the Bishopstone hybrid. The Wansdyke plant flowered again in 1948. Specimens are preserved in Herb. Pugsley (now in Herb. Mus. Brit.) and Herb. Grose (No. 5102) respectively.

Since these plants differ widely from others which have been referred to the same combination (see particularly H. McKechnie, 1918, B.E.C. 1917 Rep., 180), a detailed description of the living plants is given. Particulars in brackets refer only to the Wansdyke, and those outside to the Bishopstone hybrid; when brackets are omitted the characters apply equally to the two plants.

Stem 24 (33) cm. high, stout, slightly hollow, ridged and almost quadrangular. Leaves suberect, ± recurved. Lowest leaf 7 (9.5) x 2 (3) cm., elliptical (broadly elliptical), acute, keeled; second leaf 6 (8) x 1.5 (2) cm., broadly lanceolate; third leaf 4 (6) x 1 cm., lanceolate, very acute; uppermost leaf 3 (5) x 0.5 (0.75) cm., lanceolate, very acute; the lower leaves with faint ring spots, the upper with faint solid spots. Bracts slightly exceeding flowers, very acute, green, keel slightly purplish. Sepals 8 mm. long; the upper wholly pale purple outside, greenish-yellow tinged with purple inside, strongly arched, giving an inclination to the flower as in C. viride; the lateral greenish-yellow outside, half purplish and half greenish-yellow inside with a sharp line of distinction between the colours (greenish-yellow with purplish margins and tips), directed forwards with the subacute tips suddenly bent outwards. Upper petals connivent and overlapping under the sepal, whitish-yellow (pale pink) with a very narrow purplish border. Labellum 9 (10) mm. long, 7 (6) mm. broad, strongly deflexed, greenish above, pink below with two oblong, almost parallel, well-defined (strongly defined) blotches, sometimes with pale centres. Central lobe small (rather small), blunt (rather acute), 1 (1.5) x 1 mm., slightly shorter than (equalling) the rather broad (rather narrow) exterior lobes, directed forwards. Ovary dark purple, streaked with green. Spur 3 mm. long, pink, obtuse, curved outwards. Flowers about 22 (40). Spike 5 (11) cm. long, with many flowers still unopened, flexuous, 3 (3.5) cm. broad at base.
The general appearance was of *O. Fuchsi* with a greener coloration and with a more pronounced inclination of the flowers.

The presence of faint ring spots on the lower leaves suggests at first some possibility of the influence of a Marsh Orchis, but there is no marsh within many miles of either locality, and the character sometimes occurs in luxuriant specimens of *O. Fuchsi*. There remains consideration of *O. ericetorum* (Linton) E. S. Marshall as the Spotted Orchis parent. This species, also, is rare in Wiltshire and does not occur in the neighbourhood of Bishopstone or Horton Downs. Its influence would be expected to produce a faintly-spotted labellum as opposed to the very definite line-markings of the two specimens, and perhaps a cylindrical rather than sub-pyramidal inflorescence. The distinct central lobe of the labellum (particularly of the Wansdyke plant) seems to be good evidence of *O. Fuchsi*. Mr A. J. Wilmott has examined the Wansdyke specimen and thinks that the suggested naming is the most obvious interpretation. He draws attention to the resemblance to a plant in Herb. Mus. Brit. labelled "Habenaria viridis × Orchis maculata" from Long Witton, Northumberland (see J. Britten, 1921, *J. Bot.*, 59, 76). Comparison with the Winchester plant described and figured (McKechnie, 1918, *loc. cit.*) shows a very close correspondence in the coloration of all organs. A most striking difference, however, is apparent in the size and luxuriance of the Wiltshire plants, for the Winchester hybrid reached only 13.5 cm. and had a spike of only six loosely-placed flowers.

In 1949, two specimens were found on Bishopstone Downs by Mr H. W. Timperly.