

This new record of *Bathynella* is of interest because it is the only known site of living members of the Syncarida in Britain, the original habitat having now almost certainly been destroyed.

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Floral Initiation and its Relationship to Growth-Stage in Red Clover (*Trifolium pratense* L.)

THE vegetative apex of red clover (*Trifolium pratense*, L.) is hemispherical, cutting off leaf initials by almost vertical divisions on alternate sides and producing internodes by basal elongation. At the beginning of floral initiation the apex enlarges and the florets then begin to appear as swellings near the base on the side proximal to the penultimate leaf. Each floret initial rapidly cuts off a bract initial which enlarges to cover the developing floret. The bract becomes hairy and if it is removed at this stage the developing ovary is exposed as a conical projection about 0.2 mm. in length, ringed at the base by cells which eventually develop to form the calyx, corolla, and nectaries. The pentamerous symmetry of the

genus is apparent even at this early stage.

The production and extension of stem internodes as well as the formation of leaves, appears to be principally regulated by temperature and light intensity. This is instanced by the ability of Aberystwyth S 123 extra-late-flowering red clover to produce a large number of extended internodes when grown under non-inductive day-length conditions but in high light intensity and high temperature regimes.

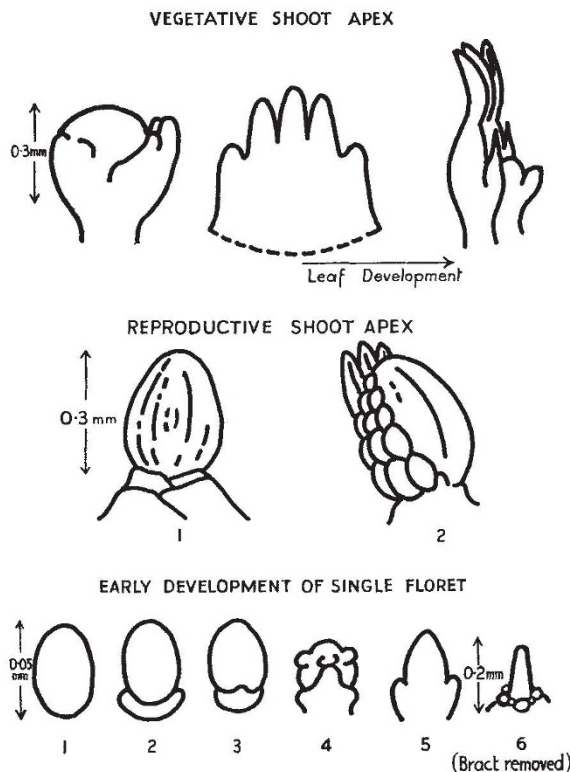
Under favourable day-length conditions, floral initiation occurs after the production of a predetermined number of internodes, the apex enlarging to form a terminal head initial. No exposure to low temperature or short day appears to be necessary in this species. The day-length requirement for flowering varies widely, being about 12 hr. for early-flowering types and in the region of 15 hr. for late-flowering varieties. It can, therefore, be seen that the exact stage at which the apex ceases to be vegetative depends largely upon the variety in question and is the product of the interaction between genotype, temperature and photoperiodic conditions.

Under field conditions at Aberystwyth, English broad red clover which produces 6-7 extended internodes before heading, forms a terminal head initial when 1-2 are externally visible, usually in mid-April. Aberystwyth S 123, a late-flowering type producing 14-16 elongated internodes, shows no apparent change-over until 6-7 are externally visible, normally near the end of May.

In conclusion it is suggested that length of day rather than growth stage is the main factor determining the point at which floral structures are initiated.

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A Lesion of the Follicle and of the Fibre of Wool and its Possible Relation with an Excess of Iron in the Forage

IT HAS been observed that sheep which graze in certain regions of the Iberian Peninsula, for example, along the Iberian Cordillera and especially in the Maella zone^{1,2}, to which this work refers, lose their wool progressively (Fig. 1). Histological analysis shows that the follicular bundles separated by loose, very thin and elastic, connective tissue, assume at the beginning a slightly polygonal arrangement. As the alteration advances, they assume first a roundish shape and later an elongated one, until the follicles become completely independent (Fig. 2).

The degeneration of the follicles (Fig. 3) is closely associated with this process of modification of the follicular bundles. The secondary follicles are lost because of: (a) their projection towards the surface and lack of activity of the bulb in producing a Malpighian epithelial small duct; (b) follicular necrosis and atresia, while Henle and Huxley laminae become horny, and an empty space is formed in the follicle which becomes filled with remains of elastic connective tissue. The degenerative process can lead to an almost complete loss of these follicles. The primary follicles persist even when they have degenerated, as they are lost with difficulty. Their degeneration, which begins after that of the secondary follicles, takes the following course: (a) separ-