

Fig. 2.
Awned palea.

bifiding the palea gets halved, and the two halves occupy a lateral instead of an opposite position with reference to the lemma. An examination of the palea manifesting this awned condition shows that the awns are the prolongations of two nerves of unequal strength in the palea. In non-awned palea these nerves exist in a less marked condition. An examination of a number of paleas shows all intermediate stages between this strong unequal two-nerved condition and the vestiges of the stronger nerve only. This prolongation of the two unequally pronounced nerves of the palea into two unequal awns, provides useful evidence in the interpretation of the palea in Gramineæ.

G. N. RANGASWAMI AYYANGAR.
T. VENKATARAMANA REDDY.

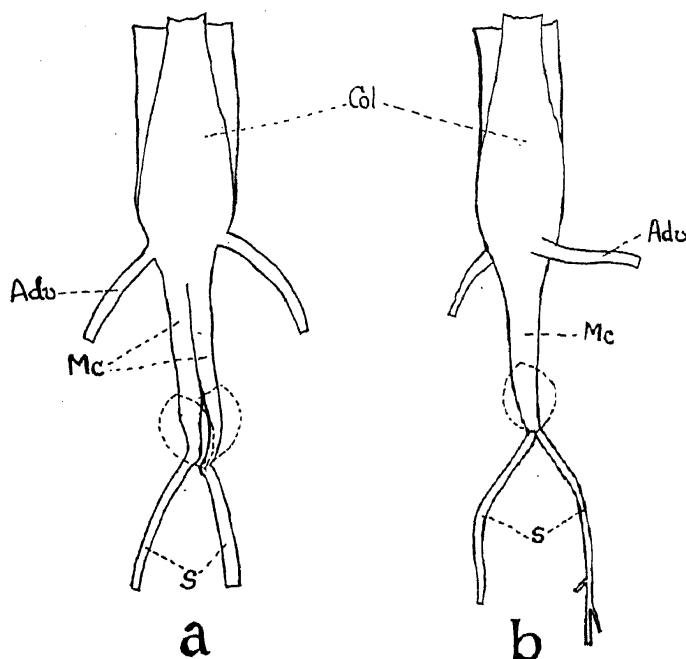
Agricultural Research Institute,
Coimbatore,
April 14, 1936.

- ¹ Bews. J. W., *The World Grasses*, 1929, 14 & 120.
² Arber, *The Gramineæ*, 1934, 112-13.
³ *Madras Agr. J.*, 1936, 24, 15-18.
⁴ *Curr. Sci.*, 1935, 3, 540-542.

False Polyembryony in *Setaria italica*, Beauv.

DURING the examination of a number of *Setaria* seedlings of K. 193—a loose-panicked, few-tillered variety—3 instances of two radicles arising from a single seed were

noticed. In two seedlings, there were two radicles per seedling, but there was only one



False Polyembryony in *Setaria italica*.

- (a) Seedling with two mesocotyls and two seminal roots.
(b) Seedling with one mesocotyl and two seminal roots.

Col.... Coleoptile. Mc.. Mesocotyl.
Adv.... Adventitious roots. S.... Seminal root or Radicle.

plumule (*vide* Illustration b). In the third seedling there were two mesocotyls and two radicles attached to a single plumule (*vide* Illustration a). In Maize, Kiesselbach (1926)¹ noted seedlings with (1) two plumules each with its own coleoptile and two primary roots enclosed in a single coleorhiza; (2) a single plumule with two primary roots in a single coleorhiza. Rangaswami Ayyangar and Panduranga Rao (1934)² recorded in *Paspalum scrobiculatum* L., a case in which there were two plumules each with its own coleoptile but with a single radicle. The first two seedlings described above belong to the second group of Kiesselbach. The occurrence of two mesocotyls, each with its own radicle, attached to a single plumule is not on record. The causes of such false polyembryony are obscure. False polyembryony being a rarity in Gramineæ, this case is interesting.

C. VIJAYARAGHAVAN.
V. PANDURANGA RAO.

Agricultural Research Station,
Hagari,
Bellary P. O.
April, 17, 1936.

- ¹ *Amer. Jour. Bot.*, 1926, 13, 33-34.
² *Madras Agr. J.*, 1934, 22, 419.