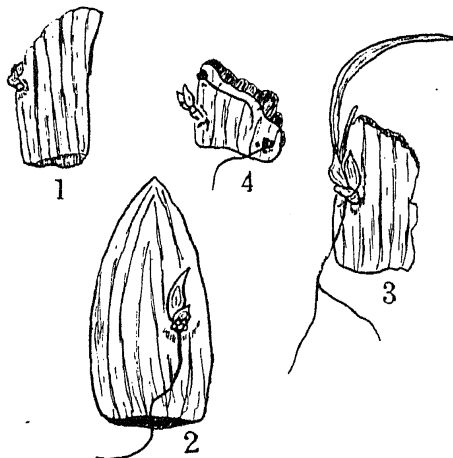


grew into seedlings. The chromo-
 units from the root tips revealed them
 teroploids with chromosome numbers
 above and below the triploid num-
 y be recalled here that out of the
 ally filled tetraploid \times diploid cross-
 were shown in pots only 15 germi-
 Thus it will be seen that the per-
 s of germination by the ordinary
 of sowing and by embryo culture at
 early stage of seed development,
 it to be 23 and 100 respectively in
 se. Embryo culture of very young
 this way helps to secure a greater
 age of F_1 plants out of incompati-
 ses than by the ordinary method of
 tion of these seeds when ripe by pot

outer surfaces (Figs. 1, 2 & 3). A single
 scale leaf sometimes produced as many as
 three such buds (Fig. 4). These made their
 appearance as small papillæ consisting of
 two overlapping opposite scale leaves.
 Later, however, they assumed the form of
 normal bulbs.



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NOTE ON THE VEGETATIVE
 AGATION OF *LILIUM LONGI-
 FLORUM* WALL.

longiflorum Wall. belongs to the
 liliaceæ. It grows in Western Hima-
 om Nepal to Kumaon at an altitude
 0 ft. and is commonly cultivated in
 as an ornamental plant.
 ulbs of this species were obtained
 e Chandra Nursery, Sikkim, and
 a sand and garden soil respectively.
 few months when the bulbs were
 ated an interesting formation of ve-
 buds on the scales was observed.
 usual method of vegetative propaga-
 l known in bulbs is bud formation
 ils of the scale leaves. In this par-
 species besides such propagation,
 ids were also formed on the scale
 n their edges, the inner and the

In an experiment a portion of the stem
 disc was cut and grown separately. It was
 observed that the innermost scale leaf form-
 ed a bud in the manner described above and
 when this scale leaf was removed the scale
 next to it behaved in a similar fashion. It
 is apparent that the scale leaves possess an
 inherent character for the production of ve-
 getative buds. When, however, the scale
 leaves were separated from the stem disc
 and put on soil they failed to produce these
 buds.

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 May 25, 1949.

A NOTE ON THE MICRO-ORGANISMS
 PRESENT IN DATE-PALM JUICE
 (*SENDHI*)

In the year 1928 M. Damodaran has done
 work on "The fermentation of Toddy and
 an account of the micro-organisms produc-
 ing it",¹ while later in 1939 V. S. Basrur
 and M. Qureshi² have done extensive
 work on the Date-Palm juice (*sendhi*) con-
 fining their attention to analysis only. The
 present note deals with the microscopic exa-
 mination of fresh and fermented juice of
Phoenix Sylovestris Roxb.

Samples of *sendhi* were obtained with the
 help of the Excise Department for our inves-
 tigation. Possible precautions were taken