



Fig. 3.

Sketch showing the "ellipsoidal structure" in the lavas, S. E. of Mahadevankatte.

(Extracted with permission, from Mr. Rama Rao's field notes.)

their close association with the current-bedded and ripple marked quartzites, conglomerates, grits and argillites of sedimentary aspect clearly indicates their sub-aqueous origin.

In the mica traps of the Kereaganahalli exposure there are a few thin bands of a fine grained dark bluish compact "Hornstone" which are traceable for more than hundred yards in length. They seem to me to be the indurated and intercalated ash beds. Petrographic descriptions of these pillow structured mica traps and their associated ash beds, etc., will be given in due course in the publications of the Department.

I am not aware of any recorded instance of the occurrence of true pillow lavas in the Dharwar schists. It would be interesting to ascertain whether they could be detected in the Dharwar schists elsewhere, outside Mysore.

I am thankful to the Director, Mysore Geological Department, for having kindly permitted me to publish this interim account of my observations, in this journal.

B. N. RAGHUNATHA RAO.

Mysore Geological Department,  
Bangalore,  
November 11, 1937.

### Inheritance of the Flowering Character in Rice.

SEVERAL crosses were tried between some of the summer (early), autumn (medium) and winter (late) rices. In a cross between a summer and an autumn rice there was a difference of about 41 days in flowering between the two parents. The  $F_1$  plants were more or less intermediate inclined much towards the early parent. The actual segregation of the  $F_2$  progenies showed about a normal curve which probably represented a multiple factor inheritance. The transgressive segregation was rather one-sided, i.e., the early plants were as early as the early parent, while some of the late plants were much later than the late parent. Two more crosses between the summer and autumn rices showed practically the same result.

In a cross between an autumn and a winter rice the  $F_1$  was definitely intermediate and the  $F_2$  had a wide range of variation with transgressive segregation on both sides. Graphically, the  $F_2$  population segregated with a bi-modal curve showing clearly a ratio of 3 late : 1 early.

In two other crosses between the summer and winter rices the  $F_1$  was intermediate and in  $F_2$  the transgression was again one-sided, i.e., towards the lateness only.

From the above it transpires that we do not get plants earlier than the earliest (summer rice) pure line types we have in our collection.

P. M. GANGULI.

Karimganj (Assam),  
October 31, 1937.

### A Note on the Development of the Female Gametophytes of Some Malpighiaceae and Polyembryony in *Hiptage madablota*.

THE development of the female gametophytes of the three genera, *Hiptage*, *Stigmatophyllum* and *Banisteria* takes place on the same lines as those of *Malpighia* and *Bunchosia* (Schurhoff, 1924).

*Female Gametophytes*.—The megasporangium takes its origin on a lateral outgrowth of the carpellary wall. The archesporial cells are hypodermal in origin and cut off a large number of parietal cells to form a massive parietal tissue. Multiple archesporium is fairly common in all the three genera. No mention of the presence of multiple archesporium has been made in