TABLE I

Mice treated with filtrates of fungi given i/p and challenged s/c by SFV

Treatments (crude filtrate)	Medication	Challenge virus	Proportion of mice survived	Survival (%)
Aspergillus flavus, strain 6-MFA ..	0,5 ml ×5 2 doses given 12 hourly one day ahead and 3 after virus 24 hourly	0·5 ml of 10^{-2}	12/15	80
Penicillium funiculosum, NRRL 2075 ..	,,	,,	8/14	57
Penicillium chrysogenum, NRRL 1951. B 25	,,	,,	14/20	70
Penicillium chrysogenum, NRRL 1951 ..	,,	,,	6/20	30
Control ..	No treatment	,,	6/14	43

TABLE II

Mice treated i/p with acetone fraction of A. flavus *compared with standard* P. funiculosum, *NRRL 2075 challenged with SFV given s/c*

Fungi	Medication	Challenge virus	Surviving mice	Survival (%)
A. flavus 6-MFA ..	2·00 ml×1 i/p, 24 hrs before virus	0·5 ml of 10^{-1}	14/16	87
P. funiculosum NRRL 2075 ..	,,	,,	6/18	34
Control (buffer saline) ..	,,	,,	0 18	0

TABLE III

Mice treated i/p with acetone fraction of A. flavus *compared with standard* P. funiculosum, *NRRL 2075 challenged with SFV given i/c*

Fungi	Medication	Challenge virus	Mice surviving	Survival (%)
A. flavus, 6-MFA ..	2·00 ml×1 i/p	0·03 ml of 10^{-1}	0/10*	0
P. funiculosum NRRL 2075 ..	,,	,,	0/10	0
Control (buffer saline) ..	,,	,,	0/10	0

*Symptom onset time prolonged in the case of mice treated with acetone fraction of *A. flavus*.

products of these two moulds extends to SFV infection in Swiss mice which are protected prophylactically to a fairly large degree.

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Central Drug Research Institute,
Chattar Manzil Palace,
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K. CHANDRA:
B. M. GUPTA.
R. K. MAHESHWARI.*

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PALAEOMAGNETISM AND THE CONTINENTAL DRIFT

RESULTS of palaeomagnetic studies on Indian rocks by Deutsch. *et al.* (1959), Athavale *et al.* (1963), Prasad (1966), etc., have given significant support to the hypothesis of Continental drift.

During the course of investigation of the pre-Cambrian dolerites of the Tirupati area, oriented samples were collected from 25 dykes for palaeomagnetic work. The natural remanent magnetic directions and the intensities of the dykes were measured with suitably sensitive astatic magnetometers. Stability

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** Junior Research Fellow, C.S.I.R., India.

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TABLE I

	Site location		Number of samples	Mean direction		Cone of confidence	Ancient latitude of the site
	Latitude	Longitude		Azimuth	Dip		
Group I dykes ..	14° N.	79° E.	16	349°	−17°	3°	9° S.
Group II dykes ..	14° N.	79° E.	42	171°	9°	1°	5° S.
Group III dykes ..	14° N.	79° E.	18	278°	−22°	4°	11° S.

tests were carried out by making use of the A.C. cleaning apparatus and Thermal Demagnetisation apparatus constructed by Radhakrishnamurthy and Sahasrabudhe (1965) in the Tata Institute of Fundamental Research, Bombay. The results of preliminary measurements and the cleaning operations revealed that some of the dykes are consistent and others are inconsistent. The plots of the consistent dykes fall into three distinct groups (Fig. 1)

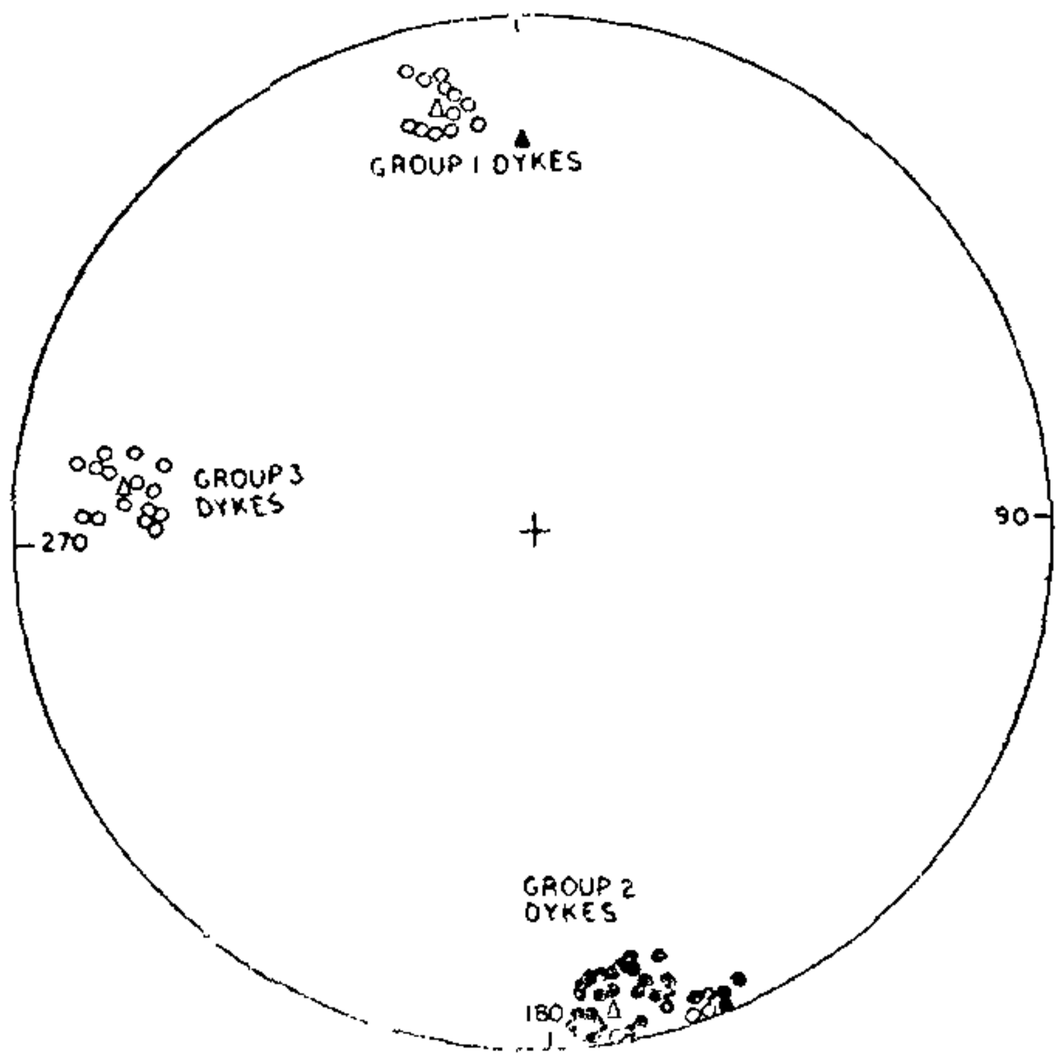

FIG. 1. A.C. cleaned directions for the consistent dykes of the Tirupati area. (O, upward dips; ●, downward dips; △, mean of the cleaned directions; ▲ present dipole.)

indicating that these three groups of dykes acquired magnetization in three different periods. Group I dykes are normally magnetized whereas Group II dykes are reversely magnetized. Group III dykes show an intermediate direction, the azimuth being around 280° east of north with negative dips around 20°.

The ancient latitudes for the Tirupati area have been calculated using the mean magnetic directions and are given in Table I. The formulae given by Blackett, *et al.* (1960) have been used in these calculations. The radius of circle of 95% confidence has been calculated using the formulae given by Fisher (1953). From Table I it is evident that the Tirupati area occupied a position in the southern hemisphere near the equator during the pre-Cambrian period.

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ON THE TEMPERATURE AND SALINITY STRUCTURE OF THE SEA OFF WALTAIR AT THE COMMENCEMENT OF 'SINKING' SEASON

BASED on the results obtained during the oceanographic cruise programme conducted by the Andhra University during 1952–57, several papers have been published on the hydrography of the Bay of Bengal[1-3]. The literature so far published points out that the physico-chemical conditions prevailing in the 0–24 km zone off the east coast are highly variable and are influenced by the river drainage, the north-east and south-west monsoons, the resulting surface currents and the associated sinking and upwelling phenomena.

The observations made during September 1957 on the temperature and salinity structure are of special significance as they depict the temperature and salinity conditions prevailing