

the lamps started glowing there was no effect of light on the current flowing or on the voltage across the lamp.

In view of the above, the use of neon lamps should be avoided in such circuits, or if used, the lamps must be painted red so that they become immune to light effect.

The author is grateful to Mr. B. Bhowmik of the Delhi University Physics Department, Delhi, for providing facilities for this work and Messrs. Jugal Kishore, M.Sc. (D. U.) and S. K. Suri, M.Sc. (N. P. L.), for helping and lending the apparatus needed.

East Punjab University, OM PARKASH.
Physics Department,
Government College,
Hoshiarpur,
October 17, 1949.

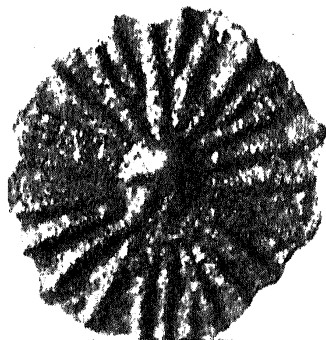
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ON A STELLATE DISCOCYCLINE
FROM THE UPPER EOCENE OF
SURAT-BROACH AREA (BOMBAY
PRESIDENCY)

STELLATE discocyclines are important in the zonal classification of the Eocene beds; and from India and neighbouring regions the following are known:

1. *Orbitoides asterifera*—Described by Carter¹ from the Laki horizon of the Kelat-valley in Baluchistan. Only the external characters are known and from Carter's description it appears to be an *Asterocyclina*.

2. *Actinocyclina alticostata*—Described by Nuttall² from the Middle Kirthar horizon of Kutch.



Actinocyclina cf. *crassicostata* Douville⁷ × 5½.
Upper Eocene of Bhodan, near Surat.

3. *Pseudophragmina* (*Asterophragmina*) *pagoda*—Described by S. R. N. Rao³ from the Yaw stage (Priabonian) of Burma.

The stellate discocycline now being recorded was collected by the author from the *Pellatispira*-bed of the Surat-Broach area to which an Upper Eocene age has been assigned.^{4, 5} The fossil has a discoidal test with a mamelon in the centre. In complete specimens radial ridges do not extend beyond the periphery of the test. The specimen figured is 6.3 mm. in diameter. An axial section shows that the radial ridges are built by lateral chambers as in the genus *Actinocyclina* as now defined by Brönnimann.⁶ The fossil is unlike any discocycline so far described from India, and appears to be very close to, if not, identical with *Actinocyclina crassicostata* which Douville⁷ has described from the Priabonian (Upper Eocene) of France.

I am indebted to Prof. S. R. Narayana Rao, for his guidance.

Dept. of Geology, B. S. TEWARI.
University of Lucknow,
Lucknow,
September 17, 1949.

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GERMINATION OF DOUBLE GRAINED
PADDY IN RELATION TO THE
ANATOMY OF LEMMA AND PALEA

In the germination of double grained paddy a peculiarity was observed. Embryos in the primary and secondary kernels are located facing the lemma and palea respectively. When the double grained paddy seeds are kept for germination, only the embryo facing lemma germinates, while one facing the palea does not. It was suspected that the embryo facing the palea may not be viable. Naked primary and the secondary kernels were taken out of the pericarp and put to germination test. It was found that the embryos in both the kernels germinated, but the embryo in the secondary kernel grew less vigorously. The mechanical obstruction of the palea apparently prevented the germination. In the embryo in the secondary kernel of order to confirm the same, anatomy of both