which has hitherto been considered as composed exclusively of Cretaceous rocks naturally arrested my attention, and on further study, it was obvious that here we have the occurrence of a bed with a foraminiferal fauna comparable in certain respects with that of the Paleocene beds of N.W. India. In making sure of this point, I have had the valuable collaboration of my friend Mr. Y. Nagappa, Assistant Palaeontologist, of the Burmah Oil Co., who very kindly undertook to examine these foraminifers in greater detail and also compare them with the types described from the Eocene beds of N.W. India. As a result of this work, it is clear that these Pondicherry foraminifers are very similar to, and in some cases (as for instance, certain species of Discoyclina and Cibicides) identical with those recorded from the Ramkot stage in N.W. India. Thus it would appear that the marine transgression during the later part of the Cretaceous period, which gave rise to the upper Cretaceous beds of this area, lingered on even into Paleocene times.

This discovery, on the east coast of India, of a lower Eocene bed, with a similarity in its foraminiferal fauna to contemporaneous beds in N.W. India, is evidently of far-reaching significance and importance; and this will be discussed in a more detailed paper to be published in due course.

My best thanks are due to Mr. Y. Nagappa for his valuable assistance in the study of these foraminifers, and to Mr. C. A. Sansom, Chief Geologist of the B.O.C., Burma, for giving Mr. Nagappa the necessary permission and facilities for doing this work in the Company's excellent Palaeontological Museum at Kheadaung, and for permitting me to publish these results.

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Lepidocyclusina from the Agate Conglomerates near Surat and Broach (Western India)

The agate conglomerates between Surat and Broach occupy a large tract of the country and often attain considerable thickness. They are frequently associated with ferruginous sandstones which contain small agates and rounded trap pebbles. All these beds are fossiliferous and occur as outliers surrounded by the Eocene Nummulitic beds. In several sections on the banks of the Tapti, near Tarkeshwar and Kimamlee, they are found resting on the Nummulitic series. In a collection of fossils I recently made from the conglomerates and the associated sandstones, I have noticed the presence of foraminifera of the important genus Lepidocyclusina which, as is well known, is confined to the Oligocene (Nar) and Miocene (Gaj) beds of the Indian region and elsewhere.¹

The Lepidocyclusina noticed in these beds are small forms and are represented by two species which are different from those hitherto recorded from India.² One of these, L. (Lepidocyclusina) sp. nov. [Fig. (a) & (b)] shows some resemblance to L. (Lepidocyclusina) cancelli Lemoiné and R. Douville. The microspheric and megalospheric generations are both represented in my collections. The other species is L. (Nephrolepidina) sumatrensis Brady var. nov. [Fig. (c) & (d)]. The affinity to the type
A Note on the Occurrence of a Chlorophyll Deficiency in Linseed (*Linum usitatissimum* L.)

A CHLOROPHYLL deficient plant was observed in the Botanical Section at Pusa in a field of the linseed variety, Pusa Type 12 (Howard and Khan), in 1933–34. This plant was quite distinct from the surrounding plants, the terminal portions of all its branches being yellow and the lower parts containing only a small amount of chlorophyll making these portions look greenish yellow (Fig. 1). As in Type 12, the flowers were pale blue and did not open fully. The plant was stunted and produced very few seeds. In the following year it bred true for the chlorophyll deficient character. The cotyledonary leaves of the seedlings were normal green, but the chlorophyll deficiency was visible from the first pair of true leaves, the growing points of the seedlings showing the characteristic yellow colour. The original plant

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1. L.-Col. L. M. Davies has recently described *L. (Polylepida) punjabensis* Davies, from the Ranikoṭ (Paleocene) beds of the Punjab Salt Range (*Pal. Ind., n.s.,* 1937, 24). This appears to be a very unusual occurrence. According to Vaughan (*Biogeographic Relations of the Orbicul foraminifera*, 1933), *Lepidocyctina* and its allies appear to have originated in America during middle and upper Eocene time and migrated from there to other parts of the world. Vredenburg and Nuttall both regard this genus as confined to the Oligocene and Miocene of Indian beds.


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**Fig. 1**

(a) Meridian section, and (b) Equatorial section of *L. (Lepidocyctina)* sp. nov. (A. form). × 25. Loc.—Kimamlee, near Surat. (c) Meridian section, and (d) Equatorial section of *L. (Nephrolepida)* sumatrensis, Brady, var. nov. (A. form). × 25. Loc.—same as above.

The species from Sumatra is very marked and the differences are only of a varietal degree. Prof. H. Douville, in his scheme of classification for the Far-East, has noted that small *Nephrolepida* of the type represented by the species *sumatrensis* as characteristic of the Burdigalian stage. The agate conglomerates and the associated sandstones may, therefore, be assigned to the corresponding Indian stage in the Gaj series.

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