these names were based upon fossil woodborings or the lining of burrows and occasionally upon shells. These parts without the pallets unfortunately do not furnish characters which are at present considered of prime importance in ship worm classification.

Recent studies of the living species have demonstrated that ship worms, like other bivalve mollusks, have restricted ranges, and this knowledge will undoubtedly be used by paleontologists in dealing with fossil species, which will result in the description of many new forms in the future.

Since the classification of recent species is now quite well established it seems a pity to burden the rather limited group Teredo with the many specific means which no one can at present place in their proper genus. It is for that reason that I now suggest the collective name Teredolithus for the reception of these generically indeterminate species of ship worms. This name is not to be considered a genus in the accepted sense, but a convenient repository for such species as we find at present generically indeterminable. This name is to have no type, and therefore continue in use as long as generically indeterminate ship worm species exist.

The splendid precedent for a somewhat similar procedure was established by Dr. Stiles in 1907, when he created the name Agamofilaria for the reception of species of Filarids based upon larval forms which failed to furnish the characters for proper generic designation. This group name has served and is still serving a useful purpose as a more or less temporary resting-place for immature Filarids.

Some of the American fossil ship worms which should be placed under Teredolithus are: *Teredo calamus* H. C. Lea, *T. circula* Aldrich, *T. dendrotestes* Brown and Pilsbry, *T. emacerata* Whitfield, *T. fistula* H. C. Lea, *Kuphus incrassata* Gabb, *Teredo mississippiensis* Conrad, *T. pugetensis* White, *T. simplex* Lea, *T. substriata* Conrad, *T. tournali* Leym. and *T. virginiana* Clark.

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DISCOVERY OF PHOSPHORUS FIXING COMPOUND IN THE SOIL

THE Louisiana Experiment Station has found an iron compound in southern soils which is responsible for the fixation of phosphorus. In the poorly drained soils the compound exists as concretions, ranging in size from below the visibility of the naked eye to fine gravel. In the well-drained soils, the concretions are not so much in evidence.

The concretions usually consist of a series of smaller ones. They are black in color, and when wet are rather soft. The structure is very open, and when the concretions are placed in water they emit a singing noise due to escaping air.

The physical structure of the concretionary material is such that it forms a very reactive compound. It appears that the phosphorus in this compound occurs as a basic ferrous phosphate. Drainage apparently determines whether the basic ferric or basic ferrous phosphate occurs.

The solubility of this phosphorus compound is exceedingly low, about .2 ppm. PO_4 in a .002 N. H_2SO_4 acid solution. As the amount of PO_4 varies in this basic compound it is likely that the solubility also varies. The effect of saturating this compound with PO_4 on the solubility is being studied, as well as various other soil treatments.

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THE BANANA IN EARLY BOOKS: FRUIT OR STEM?

IN a paper[1] published recently I made the statement that the banana, as known to-day, existed in India before the Christian era, but further examination of the evidence makes me less sure of that conclusion. The earliest record, Megasthenes (303 B. C.), refers to a banana, but speaks only of the pseudostem as being eaten. The frescoes of Ajantâ (400 B. C. to A. D. 700) show unmistakable banana plants, but a careful examination has failed to discover any pictures of the fruit, although the mango, lime, custard apple, aubergine and other fruits are clearly illustrated. It seems probable, therefore, that the stem and not the fruit of this banana was eaten. I had previously accepted Pliny's interpretation of Theophrastus' statements as probably referring to leaf, flower and fruit of a single plant but am now inclined to take a more literal translation. In that case only the second "Ετερον δέ οὐφὺλλον . . . ," that referring to the leaf, can positively be connected with the banana. Ibu Serabi says, "Musa. Abēmesuai ē calm ē medio primi grad' humidū ī fine eius nutrit par," and Ibu Sina, though using the name Musa, does not say whether the fruit or stem was eaten. It is not until 1563, with Garcia da Orta, of Goa, that I find the fruit of the banana definitely referred to as being eaten. I can not accept Rung's[2] evidence of its existence in pre-Christian Egypt as convincing, for his figures may represent hands of bananas but look at least as much like bundles of faggots tied together. The evidence of its existence in America is even less convincing. It seems evident that the Physocaulid bananas, *Musa Eusete, M. glauca,* etc.,

[1] Philip R. White, "Studies on the Banana," *Zeitschrift f. Zellforsch. u. mik. Anat.,* 7: 673–733, 1928.

[2] Richard Rung, "Die Bananankultur," in J. Perthe's "Geog. Anstalt," Bonn, 1911.