by cotangent. What is, however, very much more important is that we find here the statement that "Rheticus (1514–76) made a great advance by considering the functions as ratios instead of lines." This is also a very fundamental question relating to the history of elementary mathematics, and the widespread error involved in this quotation was considered by Tropfke in Volume 5, 1923, page 19, of the work noted above in the second paragraph. It is here explained that the modern conception of the trigonometric functions as abstract numbers did not appear before the second half of the eighteenth century, that is, about two hundred years after the death of Rheticus.

In closing we shall refer to one more misleading statement relating to a historical question of fundamental importance. Under the term "Analytic Geometry" it is stated that "the primitive system of coordinates called rectangular coordinates is due to Descartes (Lat. Cartesius) from which fact they are called Cartesian." On the contrary, Descartes did not have a clear notion of such coordinates and some rectangular as well as oblique coordinate systems were used in very early times, especially by the Greeks.[1] They were also used in Europe long before the time of Descartes. In particular, such a system is found in the works of Oresme in the fourteenth century. From what precedes it is clear that in some particulars the popular work under consideration is still in need of much improvement. It is hoped that this discussion may disclose some facts of interest to the general reader and may also have some influence on speeding the needed modifications, which are fortunately made feasible by the frequent printings. In fact, some important corrections resulted from a similar effort made several years ago. *Cf. American Mathematical Monthly,* Volume 24 (1917), page 106.

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THE CONTROL OF DAMPING OFF OF COTTON SEEDLINGS BY THE USE OF USPULUN

OWING to the unusually large amount of rainfall prevalent in northwest Arkansas in May and the early part of June, 1924, damping off of cotton seedlings became very prevalent, particularly in those rows where the stand was the thickest and best. As this threatened to destroy some valuable breeding work it was felt that something ought to be tried to effect control, although it was recognized that under field conditions there was very little promise of success.

[1] *Encyclopédie des Sciences Mathématiques,* tome 3, Vol. 3, p. 17.

Accordingly, a 0.25 per cent. solution of Uspulun was prepared, the strength recommended by the manufacturers (Bayer Chemical Company), and the solution applied in a sprinkling can to five rows of cotton. Approximately one gallon of solution was applied to the square foot of soil. Only one application was made. The results obtained are so promising that it seems worth while to present this preliminary report.

At the time of application, the soil was quite moist and the solution was taken up very readily. No particular effort was needed to force the solution into the soil, for there was but little surface drainage. The solution was applied directly over the plants with an ordinary sprinkling can, the application being made slowly so as to enable the soil to take up the solution.

No further damping off has appeared in the five treated rows. In the untreated rows damping off continued to develop to such an extent that large parts of the rows are now bare in contrast to the treated rows on which the stand is much better. A microscopic examination showed that most if not all the damping off was caused by Rhizoctonia. The treated plants have shown no ill effects from the treatment.

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NOTICE TO ZOOLOGISTS OF GENERIC NAMES TO BE INSERTED IN THE OFFICIAL LIST

THE following generic names (with genotype in parentheses) have been submitted to the International Commission on Zoological Nomenclature for inclusion in the Official List of Generic Names.

The secretary will delay final announcement of the votes on these names until January 1, 1925, in order to give to any zoologists who may desire the opportunity to express their opinions.

Mammals: *Alces* Gray, 1821, 307 (*alces*); *Arvicola* Lac., 1799, 10 (*amphibius*); *Ateles* Geoffr., 1806, 262 (*paniscus*); *Bison* H. Smith, 1827, 373 (*bison*); *Bradypus* Linn., 1758a, 34 (*tridactylus*); *Canis* Linn., 1758a, 38 (*familiaris*); *Capra* Linn., 1758a, 68 (*hircus*); *Cebus* Erxl., 1777, 44 (*capucina*); *Cervus* Linn., 1758a, 66 (*elaphus*); *Choloepus* Ill., 1811, 108 (*didactylus*); *Condylura* Ill., 1811, 125 (*cristatus*); *Cricetus* Leske, 1779, 168 (*cricetus*); *Crocidura* Wagl., 1832, 275 (*leucodon*); *Cystophora* Nills., 1820, 382 (*cristata*); *Dasyprocta* Ill., 1811, 93 (*aguti*); *Didelphis* Linn., 1758a, 54 (*marsupialis*); *Erethizon* F. Cuv., 1822, 432 (*dorsata*); *Felis* Linn., 1758a, 41 (*catus*); *Gulo* Pallas, 1780, 25 (*gulo*); *Halichoerus* Nills., 1820, 376 (*grypus*); *Lepus* Linn., 1758a, 57 (*timidus*); *Lynx* Kerr, 1792, 32 (*lynx*); *Mus* Linn.,