

on the various features connected with this new occurrence of the widely distributed *C. sowerbii*.

The Barro Colorado Island Laboratory recently established by the Institute for Research in Tropical America gives promise of being a source for a great variety of highly interesting material and a very attractive center of research activity. An account of the laboratory and its remarkable surroundings appeared in the *Journal of Heredity*, March, 1924, Vol. XV, No. 3.

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THE TAXONOMY AND RANGE OF POISON IVY

THERE are several statements in the botanical part of my book "*Rhus Dermatitis*"¹ that should be revised in accordance with recent investigations:²

On page 3 it is stated on the authority of Nuttall³ that the leaves of the male and female plants of the western poison oak (*Rhus diversiloba* T. & G.) differ in shape. This has not been found to hold true.

On page 4 the following statement occurs, "The only botanical ground for the separation of the two (*Rhus Toxicodendron* L. and *Rhus diversiloba* T. & G.) into different species is a slight difference in the shape of their leaflets." It is now known that these species are altogether distinct, as they possess excellent fruit and flower characters.

In regard to the geographical distribution of western poison oak, the herbarium specimens listed on pages 11 to 13 were not all seen by the writer and from present information² its habitat seems to be limited to California, Oregon and Washington.

The writer's studies on the taxonomy of the poison ivy group² in North America lead him to conclude that there are four species in this area, namely: *Rhus quercifolia* (Michx.) Steud. (eastern poison oak) from New Jersey southward and westward to Texas; *R. diversiloba* T. & G. (western poison oak) in California, Oregon and Washington; *R. Toxicodendron* L. (poison ivy) of general distribution exclusive of California, and *R. greenei* McNair confined to Lower California. *R. diversiloba* has a *forma radicans* and *R. Toxicodendron* has a *forma radicans*, a *forma malacotrichocarpum* and a variety *eximia*.

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¹ "*Rhus Dermatitis, Its Pathology and Chemotherapy*," University of Chicago Press, Chicago, Ill.

² "*The Taxonomy of Poison Ivy*," Field Museum Publications, Botanical series, Vol. 4, No. 3, March 14, 1925, Field Museum of Natural History, Chicago, Ill.

³ Nuttall, in Torrey and Gray, "*Flora of North America*," Vol. I, p. 218, 1838.

A NAME FOR THE n IN $\cos nt$

VARIOUS authors have recognized the desirability of having a name for the quantity n which represents 2π -times-the-frequency of a simple harmonic motion and which appears in the equation

$$x = A \cos (nt - \epsilon).$$

Professor Lamb states¹ that Lord Kelvin and Professor G. H. Darwin have used the term *speed*; Professor Lamb himself has suggested² the name *rapidity*; Mr. Jeans³ calls it *frequency*; Mr. Albert Campbell⁴ has called attention to the French term *pulsation*, and has suggested as an English equivalent the word *pulsatance*; I have suggested⁵ translating the German term *Kreisfrequenz*, and calling the n a *circular frequency*. Other names may also have been suggested, but none of them has been generally adopted.

Of the various suggested names, the words *speed* and *frequency* are now very often used with other meanings. Any of the terms *rapidity*, *pulsatance*, *circular frequency* might be adopted, but I am now suggesting still another. The reason for desiring a name for this quantity is the circumlocution that is often necessary when we have no such name. The objection to a new term is the increase in the number of names that we must remember. If a term naturally suggests the quantity which it names, it is a better term—other things being equal—than one which does not so readily suggest the quantity.

I am proposing that we call n the π -frequency of the motion. This term is easily spoken and easily printed; it at once suggests a close relationship between frequency and π -frequency, and if a student has difficulty, when he first meets these quantities, in remembering whether the π -frequency equals the frequency multiplied by 2π or divided by 2π the term π -frequency suggests multiplication.

I should be glad, and I presume many others would, if those of us who often have occasion to refer to this quantity would adopt some name for it, and it seems to me that a good name would be π -frequency.

Since writing the above I have found that Voigt⁶ has used still another term. He calls n the *vibration index* of the motion. This does not seem to be as good a name as π -frequency.

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¹ "*Hydrodynamics*," ed. 3, p. 237.

² "*Dynamical Theory of Sound*," p. 10.

³ "*Theoretical Mechanics*," p. 263.

⁴ Phys. Soc. Lond., Proc., 31, p. 81, 1919.

⁵ SCIENCE, 48, p. 447, 1918.

⁶ Wied. Ann., 40, p. 654, 1890.