

NOTES AND NEWS.

THE recent publication is announced in *Nature* of the first number of a new monthly journal under the title *Rivista di patologia vegetale*. It is edited by Sigg. A. N. and A. Berlese, and published at Avellino, in Italy; and is to be devoted to the study of animal and vegetable parasites infesting cultivated plants, to the diseases which they cause, and the remedies employed to combat them.

— According to *Nature*, the Port Officer of Mangalore reports that a native craft was overtaken by heavy weather and made for Mangalore, where there is a bad bar with about eight feet of water on it. A tremendous sea was breaking over the bar, so, before crossing it, and while running in, the native skipper opened an oil cask, forming part of the cargo, and scattered it all round in the sea plentifully, with the result that he took his craft across the bar safely, and so saved the vessel and the cargo. The vessel's name was "Mahadeprasad," and she was of 95 tons, bound from Cochin to Bombay. This is said to be the first case on record of a native tindal who has successfully used oil in troubled waters.

— In *Science* of July 8, the closing paragraph of the article by Dr. C. V. Riley, on "The Number of Broods of the Imported Elm-leaf Beetle," should have read: "Our statement upon page 8 was a general one, based upon the observed shortness of the larval life, and upon the fact that the earliest larvæ mature before the end of May, and upon the additional fact that we know that newly developed beetles are found early in June. Prof. John B. Smith, in a paper read before the Entomological Club of the American Association for the Advancement of Science, in August of this year, made the statement that there is but one annual generation in New Jersey. The adult beetles develop from the larvæ which have fed during the summer, entering winter quarters as early as the first week in August. This state of affairs may probably hold in more northern regions, but in Washington it is safe to say that there are two generations, because, as just stated, newly developed beetles (the progeny of those which hibernate) appear in early June. These lay eggs, and, in fact, egg-laying may continue until the end of September, and larvæ have actually been found by Mr. Pergande in October."

— Mr. D. J. Macgowan, writing in the *Shanghai Mercury*, gives an account of some remarkable statements made by a group of Chinese traders who lately undertook a mercantile exploration of the interior of Southern Formosa. They started from Lamalan, which Mr. Macgowan takes to be Chokeday of the charts, and in seven days reached their objective point, Hualin Stream. They lodged in stone caverns, and the chattering of monkeys and the sounds of insects seemed to them "appalling and indescribable." The region was so "weird" that it reminded them of "legends of the kingdom of hobgoblins." Among the trees were some of "prodigious girth, forming a vast forest." These trees are said to measure more than ten outstretched arms. A tree said to flourish in the same forest is described as bearing "flowers, red and white, which are larger than a sieve, and of extraordinary fragrance." Mr. Macgowan adds: "Mr. Taylor, while searching for orchids, heard of these majestic trees and huge flowers, which he inferred, from what natives said, were epiphyte orchids. I am moved to make known this sylvan discovery in the hope that, pending the exploration of this *terra incognita* by our botanists, Dr. Henry or Mr. Ford, residents in Formosa will take measures to provide those naturalists with specimens of flowers, seeds, leaves, and bark of the trees concerning which the Chinese have excited our curiosity."

— "The New Decimal Association, whose headquarters are at Botolph House, Eastcheap," says the *London Daily Graphic* of May 14, "has memorialized the Lords of the Committee of Council on Education on the desirability of taking an important step in connection with the introduction of the metric system in this country. The May examinations of the Science and Art Department are known through the length and breadth of the land, and much has been done by means of these examinations to popularize and extend technical study. The memorial which has been pre-

sented recommends that in certain of the science examinations alternative questions be given in future, based on the metric system of measurement, which may be taken at the option of the candidate in lieu of questions based on feet and inches. In this way the large and intelligent class of candidates for certificates of the department will be induced to learn the metric system. The Committee of Council on Education has already ordered that the principles of this system should be taught in the higher standards of all elementary schools; and one of the steps taken by the school boards of London and other towns in consequence of this order has been to furnish the pupil teachers and advanced scholars with boxwood rules having a decimalized inch scale and a metric scale in juxtaposition. In addition to this, colored wall-charts of the metric weights and measures are used, and in this way the rising generation will to a great extent be prepared for the introduction of these weights and measures in future.

— The second annual geological expedition of the State University of Nebraska, undertaken by a party of six, left Lincoln for the field, June 21, 1892. This is known as the Morrill Geological Expedition, in honor of Charles H. Morrill, regent of the State University, whose liberality makes this work possible. The primary object of the expedition is the collection and preservation of geological specimens in general, but more particularly the palæontological forms for which the State and immediate surroundings are famous. The chief objective points are the Tertiary deposits of the White and Niobrara Rivers, and the Bad Lands of Nebraska, Wyoming, and South Dakota. The expedition is provided with tents,—furnished by Governor Boyd,—with teams and heavy covered wagons of the prairie-schooner type, and with apparatus, camping equipment, and provisions for the summer. The party consists of six members,—exclusive of guide,—Mr. Thomas H. Marsland, Frederick C. Kenyon, Arthur C. Morrill, and Harry H. Everett, all of the State University of Nebraska, and James H. Haines of Iowa College, together with Erwin H. Barbour, acting State geologist, as professor in charge. The "Fossil Corkscrew," or Daimonelix, beds were visited first, and some tons of these extraordinary new fossils—noticed and figured in *Science*, February, 1892—were obtained. Native lumber and hay for packing are carried, and specimens are boxed as found, and delivered at the nearest station or siding. At the close of the expedition these scattered collections will be brought together and delivered at the State University in cars, which the railroad companies have generously offered for that purpose.

— The eighth annual report of the Wisconsin Experiment Station devotes a large share of space to questions relative to ensilage. One chapter is devoted to a careful study, by F. H. King, of the construction and filling of silos. Mr. King, having visited 93 silos in Missouri, Michigan, Ohio, and Illinois, and several farmers while filling their silos, in order to obtain data for this chapter. Mr. King concludes that a stone silo, properly constructed, will keep the silage as well as a wooden one, but that it will be necessary to renew the cement lining frequently, or else to whitewash it with fresh cement every year, as the acids of the silage soon soften the cement. He finds that lath and plaster is a failure as a silo lining, both because of the softening of the plaster and the liability to injury with the fork in handling the silage. Of the wooden linings, that made by two thicknesses of boards with tarred paper between, all nailed firmly together, is showing greatest durability; but all wooden linings rot soon unless well ventilated. Painting the lining tends to hasten decay instead of preserving it. From an experiment in feeding corn silage in comparison with dry corn fodder, the following conclusions are reached: 1. A daily ration of four pounds of hay and seven pounds of grain feed, with corn silage or field-cured fodder corn *ad libitum*, fed to twenty cows during sixteen weeks, produced a total quantity of 19,813 pounds of milk during the silage period, and 19,801 pounds of milk during the fodder-corn period. 2. When we consider the areas of land from which the silage and fodder corn are obtained, we find that the silage would have produced 243 pounds more milk per acre than the dry fodder, or the equivalent of 12 pounds of butter. This is a gain of a little more than three per cent in favor of the silage.