

are very intimately associated during the whole growth period.

The sex chromosomes of an old world monkey has been studied in spermatogenesis and in the somatic cells of embryos. The Rhesus maccacus males show 48 chromosomes, one of which is a small ball-like element with no mate of like size or shape, just as the writer found in man and a new world monkey.³ In the first maturation division there are 23 tetrads and one chromosome made up of two very unequal parts, the larger (X) being rod-like and the smaller (Y) dot-like. The X and Y components segregate to opposite poles of the spindle, just as they do in the case of man.

The somatic cells of male Rhesus embryos (amnion) show consistently 48 chromosomes, including the ball-like Y element and the rod-like X element, neither of which have mates of like size or shape. Female embryos (chorion and brain cells) show consistently 48 chromosomes, but no Y is present and the X is paired.

In the three primates studied so far by the writer (man, a new and an old world monkey) the sex chromosomes have all been of the X-Y type, which were very similar both in form and behavior. The evidence for the Rhesus monkey is complete and makes it certain that the sex chromosomes of the other two forms have been correctly identified.

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SCORPIONS IN NORTH DAKOTA

It is a well-known fact that scorpions are tropical in their distribution. The receipt in December, 1921, of three immature specimens, sent in by P. C. Arildson from Alexander, McKenzie County, North Dakota, near which point they were found in a lignite mine, was an occurrence of more than usual interest.

The appearance in certain newspapers of an account of the finding of scorpions in the state resulted in the receipt of several letters from persons in western North Dakota, who stated that scorpions had been seen several times previously. All these reports came from that general region known as the "Bad Lands."

Responding to my request for specimens a second instance was reported in the spring of 1922 and a single specimen was sent in from Oakdale, in Dunn County, North Dakota, with the statement that several had been seen near that place during the winter. A third instance of the kind was reported from Golden Valley County, when a single specimen was sent in from Trotters, North Dakota, in November, 1922. Both these localities are on the edge of the "Bad Lands."

³ *Journ. Exp. Zool.*, Vol. 37, p. 291, 1923; *SCIENCE*, Vol. LVI, p. 286, September 8, 1922.

All these specimens, except the last, have been referred to Dr. H. E. Ewing, U. S. National Museum at Washington. Dr. Ewing determined the scorpion as *Vejois boreus* Gir., and wrote that the specimens sent were identical with others of this species from the old Marx collection in the museum, taken from Fort Pierre "Dakota" (South Dakota) years ago. According to Ewing (in litt.), "*Vejois boreus* is represented in our collection by specimens from Lincoln, Nebraska; Indian Springs, Georgia; Gold Hill, Oregon; Soldier, Idaho; Fort Steele, Wyoming; Arizona; Salt Lake, Utah; and some other specimens with no locality."

Professor J. H. Comstock in his "Spider Book" records 23 species of known scorpions in North America. Of these only one, the species under consideration, is found at all in the northern United States. In the fourth provisional zone map of North America, published by the U. S. Biological Survey, small portions of western North Dakota are indicated as being included in the upper austral zone, the remainder of the state being in the transition zone. From the records at hand it seems likely that this species may belong to the upper austral. There seems to be no previous record in the literature of the occurrence of this order in North Dakota.

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QUOTATIONS

THE PRIESTLEY MEDAL

THE first Priestley Medal of the American Chemical Society has been awarded to Dr. Ira Remsen, President Emeritus of Johns Hopkins University. His achievements in research have been principally within the field of pure science, his discovery of saccharin being little more than an incident among them. Of great importance have been his contributions to the linking of chemistry with medicine. Distinction is also his for his unwearying efforts—and success—in keeping the torch of chemistry alight in this country when the public either could not or would not see that there was illumination in the flame.

Returning from Germany in 1872, he became professor of chemistry at Williams College, where, after earnest pleading, he secured laboratory space eight by ten feet. But in 1876 Johns Hopkins invited him to go to Baltimore as professor, to do his own work in any way he pleased, assured that no one would interfere with him. His organization of the famous department of chemistry in that university has sometimes been referred to as the turning point in the science in the United States. In 1879 he brought out *The American Journal of Chemistry* and edited it