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PROFESSOR WILLIAM MORTON WHEELER

WITH A LIST OF HIS PUBLISHED WRITINGS

Professor Wheeler was born in Milwaukee, Wisconsin on March 19, 1865 and died suddenly in Cambridge, Massachusetts on April 19, 1937 shortly after passing his seventy-second birthday. He had retired from active teaching in 1934, but was still energetically engaged in the continuance of his biological investigations which had extended, without interruption, over a full half century.

Young Wheeler was educated in Milwaukee, for a time in the public schools and afterwards in the Englemann German Academy. He was later graduated in 1884 from the German-American College, a remarkably efficient school, with ideals based on those of the fine group of early German immigrants whose culture dominated Milwaukee during the latter part of the last century. He always attributed much to the training received at the Academy; perhaps too much, for he was certainly their star pupil of all time. There he received a broad education, and developed his first interest in the classics, which he read extensively, never forgot and referred to frequently in his later writings. At this point his formal education ended for a period of six years.

Wheeler had always been much interested in Natural History, and was greatly delighted when in 1884 Professor H. A. Ward of Rochester brought to Milwaukee a collection of stuffed animals, skeletons, and other natural history specimens, with the idea of selling them in that city as the nucleus for a public museum. Ward was so pleased with Wheeler that he offered him a position in the Ward's Natural Science Establishment at Rochester. This was accepted

and Wheeler spent a year arranging zoölogical material of all kinds and identifying specimens for Professor Ward. At that time he prepared a check-list of shells, so well done that it is still useful to conchologists after the lapse of more than fifty years! At the Ward Establishment he met Carl Akeley, later famous taxidermist. Concerning their early association and life-long friendship Wheeler has written interestingly in his obituary of Akeley, published in 1927. This contains also reminiscences of Wheeler's own early youth.

He left Ward's in 1885, returned to Milwaukee and at the invitation of the well-known entomologist, Dr. G. W. Peckham, who was then principal of the Milwaukee High School, accepted a position to teach German and physiology there. After he had taught in the high school for two years, he was made custodian of the newly established Milwaukee Public Museum where he remained until 1890. During this period there was established nearby the Allis Lake Laboratory, a biological station, to which Professor C. O. Whitman came as director. From contact with this laboratory and especially through the interest of one of its staff, Dr. William Patton, Wheeler was induced to undertake a study of insect embryology. With the help of Dr. Patton he mastered the necessary microscopical technique, procured a microtome and set to work, utilizing such time as he could spare from his duties at the museum.

Professor Whitman was then called to Clark University, and recognizing young Wheeler's genius in the problem he had undertaken, offered him a fellowship at Clark. This he accepted in 1890 and two years later was granted the degree of Doctor of Philosophy for this "Contribution to Insect Embryology" which had its inception in the happy circumstance of the establishment of the Allis Laboratory. The next year Wheeler spent in Europe, first at Würzburg, then at the Naples Zoölogical Station and finally at Liège before returning to America. He then went to the University of Chicago, where he remained for five years, first as instructor in embryology and after 1896 as assistant professor. During this period his interest in insect embryology was waning, and he became more interested in other phases of entomology.

In the autumn of 1899 he accepted a position as Professor of Zoölogy in the University of Texas. There, with the aid

WILLIAM MORTON WHEELER

From a photograph taken in 1915 by Professor A. L. Melander at Berkeley, California, during the summer meeting of the American Association for the Advancement of Science.

search and for the training of students in the several branches of applied biology. At first the Bussey Institution formed a part of the Graduate School of Applied Sciences, but a few years later the institution staff was made a separate faculty of the University and Professor Wheeler was appointed its dean. He served in this capacity from 1915 to 1929. He frequently spoke of this long stay at the Bussey as including the best years of his life. During that time he always had clustered about him some half a dozen graduate students working in entomology toward the degree of Doctor of Science, which was the applied science degree awarded by the University to students in applied biology. Most of these students now hold responsible positions in colleges, universities or similar institutions in America and abroad, and their consistently high attainments show very clearly the deep influence exercised by his remarkable intellect upon their subsequent careers.

In 1929 he resigned from the deanship and moved his work to Cambridge, pending the completion of the New Biological Laboratories. No new dean was appointed, as the several biological units of the University were soon to be consolidated and made a part of the Faculty of Arts and Sciences, with headquarters in the new building. There he spent his last years, continuing to teach until his retirement in 1934. After that he still retained his same quarters in the laboratory, where he worked continuously until the last day of his life, even more actively than before, since the time previously devoted to lectures and students could be spent upon his own research. During this time his energy and enthusiasm never lagged and, as he told me only a few days before his death, he had already on hand collections of ants that would take him many years to work up. This, of course, did not take into account the many related biological problems that continually arose in his mind in connection with taxonomic work. At that moment he was just finishing his last extensive manuscript dealing with mosaic anomalies in ants, an investigation which had unexpectedly developed from the study of some collections of ants recently received from the American tropics.

Most persons conversant with Professor Wheeler's published contributions to biological science and to entomology

in particular, will regard these as his greatest achievements. There are, however, a favored few who have had the good fortune to derive from him, through personal contact, either as students or colleagues, a vast amount of information and inspiration which they will always treasure and some of which they will be able to pass on to their own students and younger associates. Wheeler always dealt with his students as he would with colleagues. With his broad intellectual viewpoint he could do this with ease, and without apparent effort he would quickly stimulate these young men to accomplishments quite beyond their own expectations. He was always enthusiastically interested in his own work and however deeply immersed in it, was always ready to welcome the student who wandered into his laboratory at any time. Frequently, such conferences would turn to an account of what he was doing at the moment or to a critical review of some important book which he had just read. The immediate effect of such contacts was frequently disheartening in the extreme, as it emphasized the extent of any biological problem and the inadequate background of the young man who was attempting to solve it. However, the final result of a series of such meetings was highly salutary, and it gave to most of his students the impetus needed to complete their work well, and furthermore to prolong their studies after the inevitable doctor's thesis had been finished. This ability to instill his own ideals of research into the minds of younger men was a salient characteristic of his personality and it has done much to further the real advance of entomological investigation in many fields.

To see him casually in his laboratory, working over a box of mounted specimens of ants and attaching to them labels with their Latin names, one would have taken him for a taxonomist pure and simple. Under such circumstances he was, and the endless amount of material from all parts of the world that passed through his hands during the thirty-five years that he was an authority on the classification of ants resulted in the description of an enormous number of new species, sub-species and varieties. Such work requires immense concentration, continuous study and perfect familiarity with a maze of literature. As a result most taxonomic workers lose interest in all the problems of general biology.

Wheeler was a glaring exception to this rule as his encyclopaedic familiarity with the structure and adaptations of ants not only served to increase his interest and curiosity in the many other phases of biology, but enabled him to approach them with a minute, systematic knowledge of detail utterly beyond the common range. This method of approach is especially notable in connection with his papers on gynandromorphs in ants, the behavior of ant-lions and worm-lions, and his contributions on the evolution of social and parasitic habits among insects.

Professor Wheeler's thirst for reading was insatiable and as he read the several common European languages with great facility, the literary field in which he could browse was very wide. His interest in literature was almost exclusively serious although it was by no means restricted to entomology, biology or even to the natural sciences. It was, however, primarily confined to biology, psychology and philosophy in the widest sense, although few of his friends or colleagues were ever able to bring to his attention any book of general interest with which he was unacquainted. Most frequently he had read it through (which meant literally that) for although he read with great rapidity, his very retentive memory allowed no details to be forgotten. In addition, a pencil in his hand was intermittently busy underlining sentences or marking paragraphs to which he might wish later to refer. Similarly, every bundle of reprints that came to his desk, and there were a great many of these, was carefully examined, first, to cull out any in which he could see nothing of interest. The others were read almost in their entirety.

He had such a keen sense of humor that he derived a great deal of fun from many books and dissertations that were not intended to furnish amusement. This undoubtedly made up in great part for the lack of light reading on his book-shelves. In company, however, he was very fond of a good story, and no matter what the subject, his conversation was always enlivened with a humor uniformly appealing to his wide range of friends and colleagues. When it came to the point, Professor Wheeler was extremely outspoken and he did not mince words in voicing either approbation or disapproval no matter to whom his remarks might be directed. He always

spoke in good faith, however, and his opinions were almost always accepted in the spirit they were given.

Much more could be said of Professor Wheeler's academic career and scientific writings. A fine appreciation written by several of his colleagues has appeared in Science.[1] He received several honorary degrees and medals in recognition of his entomological investigations. He enjoyed membership in numerous important societies; honorary membership in three foreign and two American entomological societies. During his long residence at Harvard he took a leading part in the activities of the Cambridge Entomological Club and a continued interest in its journal PSYCHE to which he contributed several short articles in almost every volume.

Wheeler was an unusually keen and enthusiastic collector. After the first few years, his immediate interest was centered almost entirely on ants, but he never failed to bring back from any excursion many other valuable specimens. He traveled extensively through the United States, Mexico and other parts of tropical America and twice visited Australia; also his visits to Europe and North Africa offered opportunities for collecting that were never neglected. He had returned from an extensive and strenuous trip with his wife into Mexico only a few weeks before his death.

The list of titles in the appended bibliography is believed to be a practically complete list of Professor Wheeler's biological books, memoirs and papers. It has been compiled primarily from a catalogue which he himself maintained, and I have one of his younger students, Professor F. M. Carpenter to thank for preparing the preliminary draft during my own protracted absence from America.

This bibliography speaks for itself as to the varied interests and accomplishments of Professor Wheeler. It cannot of course give any indication of the great clarity of his scientific statements and the fine literary style which pervades all of his writings. From the latter standpoint alone several of his humorous and satirical addresses could lay claim to rank as classics. In addition each contains several cleverly concealed and well documented scientific pills which represent the real thesis of the communication. By far the

[1]June 4, 1937; vol. 85, pp. 533-535.

greater number of papers deal with ants, many with other social insects, a number with various types of parasitism and with evolutionary phenomena. Although nearly all relate to insects directly, only those concerned entirely with taxonomy can be classed as strictly entomological in that they do not contain material of immediate interest to other biologists.

Among those who knew him personally or through his writings, he had a host of friends, almost no enemies, and certainly all regarded his intellectual accomplishments with an admiration that will never fade till they join him in the great unknown.

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PUBLICATIONS OF WILLIAM MORTON WHEELER

1885

Catalogue of Specimens of Mollusca and Brachiopoda for Sale at Ward's Natural Science Establishment. Rochester, New York, 167 pp., 202 figs.

A List of Trees found in the City of Milwaukee. Proc. Wisconsin Pharmaceut. Assoc., pp. 24-25.

1887

Distribution of Coleoptera along the Lake Michigan Beach of Milwaukee County. Proc. Wisconsin Nat. Hist. Soc., April 1887, pp. 132-140.

1888

The Flora of Milwaukee Co., Wisconsin. Proc. Wisconsin Nat. Hist. Soc., April 1888, pp. 154-190.

The Spiders of the Sub-family Lyssomanae. (With G. W. and E. G. Peckham). Trans. Wisconsin Acad. Sci., Arts and Lett., vol. 2, pp. 222-256, 1 plate.

1889

The Embryology of *Blatta germanica* and *Doryphora decemlineata*. Journ. Morph., vol. 3, pp. 291-386, 7 plates, 16 figs.

Homologues in Embryo Hemiptera of the Appendages of

the First Abdominal Segment of other Insect Embryos. American Naturalist, vol. 23, pp. 644-645.

Ueber drüsenartige Gebilde im ersten Abdominalsegment der Hemipterenembryonen. Zool. Anzeig., Jahrg. 12, pp. 500-504, 2 figs.

On Two Species of Cecidomyid Flies Producing Galls on *Antennaria plantaginifolia*. Proc. Wisconsin Nat. Hist. Soc., April 1889, pp. 209-216.

Two Cases of Insect Mimicry. Proc. Wisconsin Nat. Hist. Soc., April 1889, pp. 217-221.

1890

Description of Some New North American Dolichopodidae. Psyche, vol. 5, pp. 337-343, 355-362, 373-379.

The Supposed Bot-fly Parasite of the Box-turtle. Psyche, vol. 5, p. 403.

Review of Poulton's "Colors of Animals". Science, vol. 16, p. 286.

Hydrocyanic Acid Secreted by *Polydesmus virginicus* Drury. Psyche, vol. 5, p. 442.

Review of R. H. Lamborn's "Dragon-Flies versus Mosquitoes". New York, Appleton. Science, vol. 16, p. 284.

On the Appendages of the first Abdominal Segment of Embryo Insects. Trans. Wisconsin Acad. Sci. Arts and Lett., vol. 4, pp. 87-140, 3 plates.

Note on the Oviposition and Embryonic Development of *Xiphidium ensiferum* Scud. Insect Life, vol. 2, pp. 222-225.

Ueber ein eigenthümliches Organ in Locustidenembryo. Zool. Anzeig., Jahrg. 13, pp. 475-480.

1891

The Embryology of a Common Fly. Psyche, vol. 6, pp. 97-99.

The Germ-band of Insects. Psyche, vol. 6, pp. 112-115.

Neuroblasts in the Arthropod Embryo. Journ. Morph., vol. 4, pp. 337-343, 1 fig.

Hemidiptera haeckelii. Psyche, vol. 6, pp. 66-67.

1892

Concerning the "Blood-tissues" of the Insects. Psyche, vol. 6, pp. 216-220, 233-236, 253-258.

A Dipterous Parasite of the Toad. Psyche, vol. 6, p. 249.

1893

A Contribution to Insect Embryology. Inaugural Dissertation. Journ. Morph., vol. 8, pp. 1-160, 6 plates, 7 figs.

The Primitive Number of Malpighian Vessels in Insects. Psyche, vol. 6, pp. 457-460, 485-486, 497-498, 509-510, 539-541, 545-547, 561-564, 2 figs.

1894

Syncœlidium pellucidum, a new Marine Triclad. Journ. Morph., vol. 9, pp. 167-194, 1 plate.

Planocera inquilina, a Polyclad inhabiting the Gill chamber of *Sycotypus canaliculatus.* Journ. Morph., vol. 9, pp. 195-201, 2 figs.

Protandric Hermaphroditism in Myzostoma. Zool. Anzieg., vol. 6, pp. 177-182.

1895

The Behavior of the Centrosome in the Fertilized Egg of *Myzostoma glabrum* Leuck. Journ. Morph., vol. 10, pp. 305-311, 10 text-figs.

Translation of Wilhelm Roux's "The Problems, Methods and Scope of Developmental Mechanics." Biological Lectures delivered at the Marine Biological Laboratory at Woods Hole, Summer Session of 1894. Boston, Ginn & Co., pp. 149-190.

1896

The Sexual Phases of Myzostoma. Mitth. a.d. Zool. Station zu Neapel, vol. 12, pp. 227-302, 3 plates.

The Genus Ochthera. Entom. News, vol. 7, pp. 121-123.

Two Dolichopodid Genera new to America. Entom. News, vol. 7, pp. 152-156.

A New Genus and Species of Dolichopodidae. Entom. News, vol. 7, pp. 185-189, 1 fig.

A New Empid with Remarkable Middle Tarsi. Entom. News, vol. 7, pp. 189-192, 3 figs.

An Antenniform Extra-appendage in *Dilophus tibialis* Loew. Arch. f. Entwickl.-Mech. d. Organism., vol. 3, pp. 261-268, 1 plate.

1897

A Genus of Maritime Dolichopodidae New to America. Proc. California Acad. Sci., vol. (3) 1, pp. 145-152, 1 pl.

The Maturation, Fecundation and Early Cleavage of

Myzostoma glabrum Leuckart. Arch. Biol., vol. 15, pp. 1-77, 3 pls

Two Cases of Mimicry. Chicago Univ. Record, vol. 2, p. 1.

[Marine Fauna of San Diego Bay, California]. Zoölogical Club, Univ. of Chicago, meeting of April 14, 1897. Science, n.s., vol. 5, pp. 775-776.

1898

A New Genus of Dolichopodidae from Florida. Zoöl. Bull., vol. 1, pp. 217-220, 1 text-fig.

Burger and Carrière on the Embryonic Development of the Wall-bee (Chalicodoma). American Naturalist, vol. 32, pp. 794-798.

Review of A. S. Packard's "Text Book of Entomology". Science, n.s., vol. 7, pp. 834-836.

A New Peripatus from Mexico. Journ. Morph., vol. 15, pp. 1-8, 1 pl., 1 fig.

1899

George Baur's Life and Writings. American Naturalist, vol. 33, pp. 15-30.

The Life History of Dicyema. Zool. Anzeig., vol. 22, pp. 169-176.

Anemotropism and Other Tropisms in Insects. Archiv. für Entwickl.-Mech. d. Organism., vol. 8, pp. 373-381.

The Prospects of Zoölogical Study in Texas. Texas University Record, vol. 1, pp. 335-339.

New Species of Dolichopodidae from the United States. Proc. California Acad. Sci., Zoöl., (3), vol. 2, pp. 1-84, 4 pls.

The Development of the Urinogenital Organs of the Lamprey. Zool. Jahrb. Abth. f. Morph., vol. 13, pp. 1-88, 7 pls.

J. Beard on the Sexual Phases of Myzostoma. Zool. Anzieg., vol. 22, pp. 281-288.

Kaspar Friedrich Wolff and the Theoria Generationis. Biol. Lectures Marine Biol. Lab., Woods Hole, pp. 265-284.

1900

The Free-swimming Copepods of the Woods Hole Region. Bull. U. S. Fish Commission for 1899, pp. 157-192, 30 figs.

On the Genus Hypocharassus Mik. Entom. News, vol. 11, pp. 423-424.

The Study of Zoölogy. Univ. of Texas Record, vol. 2, No. 2, pp. 125-135.

Review of Korschelt and Heider's "Text-book of Embryology". Science, n.s., vol. 11, pp. 148-149.

The Female of *Eciton sumichrasti* Norton, with some notes on the habits of Texan Ecitons. American Naturalist, vol. 34, pp. 563-574, 4 figs.

The Habits of *Myrmecophila nebrascensis* Bruner. Psyche, vol. 9, pp. 111-115, 1 fig.

A Singular Arachnid (*Koenenia mirabilis* Grassi) Occurring in Texas. American Naturalist, vol. 34, pp. 837-850, 3 figs.

A New Myrmecophile from the Mushroom Gardens of the Texan Leaf Cutting Ant. American Naturalist, vol. 34, pp. 851-862, 6 figs.

A Study of Some Texan Ponerinae. Biol. Bull., vol. 2, pp. 1-31, 10 figs.

The Habits of Ponera and Stigmatomma. Biol. Bull., vol. 2, pp. 43-69, 8 figs.

1901

The Males of Some Texan Ecitons. American Naturalist, vol. 35, pp. 157-173, 3 figs. (With W. H. Long).

Impostors Among Animals. Century Magazine, vol. 62, pp. 369-378.

The Compound and Mixed Nests of American Ants. American Naturalist, vol. 35, pp. 431-448, 513-539, 701-724, 791-818, 20 figs.

Microdon Larvae in Pseudomyrma Nests. Psyche, vol. 9, pp. 222-224, 1 fig.

The Parasitic Origin of Macroërgates among Ants. American Naturalist, vol. 35, pp. 877-886, 1 fig.

1901

An Extraordinary Ant-Guest. American Naturalist, vol. 35, pp. 1007-1016, 2 figs.

Notices biologique sur les fourmis Mexicaines. Ann. Soc. Entom. Belgique, vol. 45, pp. 199-205.

1902

A New Agricultural Ant from Texas, with Remarks on the North American Species. American Naturalist, vol. 36, pp. 85-100, 8 figs.

Review of G. N. Calkins "Biology of the Protozoa". American Naturalist, vol. 36, pp. 214-215.

A Consideration of S. B. Buckley's "North American Formicidae". Trans. Texas Acad. Sci. for 1901, vol. 4, pp. 17-31.

Empididae. Biol. Centrali-Americana. Diptera (Supplement) pp. 366-376. (With A. L. Melander).

A Neglected Factor in Evolution. Science, n.s., vol. 15, no. 385, pp. 766-774.

Natural History, Oecology or Ethology? Science, n.s., vol. 15, pp. 971-976.

Formica fusca Linn. subsp. *subpolita* Mayr. var. *perpilosa* n. var. Mem. y Rev. Soc. Cient. "Antonia Alzate", Mexico, vol. 17, pp. 141-142.

New Agricultural Ants from Texas. Psyche, vol. 9, pp. 387-393.

Translation of Carlo Emery's "An Analytical Key to the Genera of the Family Formicidae, for the Identification of the Workers". American Naturalist, vol. 36, pp. 707-725.

Review of "Temperaturverhältnisse bei Insekten" by P. Bachmetjew. American Naturalist, vol. 36, pp. 401-405.

Review of "The Elements of Insect Anatomy" by J. H. Comstock and V. L. Kellogg. Science, n.s., vol. 16, pp. 351-352.

An American Cerapachys, with Remarks on the Affinities of the Cerapachyinae. Biol. Bull., vol. 3, pp. 181-191, 5 figs.

The Occurrence of *Formica cinera* Mayr and *Formica rufibarbis* Fabricius in America. American Naturalist, vol. 36, pp. 947-952.

1903

Review of James Mark Baldwin's "Development and Evolution". Psyche, vol. 10, pp. 70-80.

Erebomyrma, A New Genus of Hypogaeic Ants from Texas. Biol. Bull., vol. 4, pp. 137-148, 5 figs.

Dimorphic Queens in an American Ant. (*Lasius latipes* Walsh). Biol. Bull., vol. 4, pp. 149-163, 3 figs. (with J. F. McClendon).

Ethological Observations on an American Ant. (*Leptothorax emersoni* Wheeler). Arch. f. Psychol. u. Neurol., vol. 2, pp. 1-31, 1 fig.

A Revision of the North American Ants of the Genus Leptothorax. Proc. Acad. Nat. Sci. Philadelphia, pp. 215-260, 1 pl.

Review of T. W. Headley's "Problems of Evolution". Psychol. Rev., vol. 10, pp. 193-199.

A Decade of Texan Formicidae. Psyche, vol. 10, pp. 93-111, 10 figs.

The North American Ants of the Genus Stenamma (*sensu stricto*). Psyche, vol. 10, pp. 164-168.

How Can Endowments be Used Most Effectively for Scientific Research? Science, n.s., vol. 17, pp. 577-579.

The Origin of Female and Worker Ants from the Eggs of Parthenogenetic Workers. Science, n.s., vol. 18, pp. 830-833.

Review of "Report on the Collections of Natural History made in the Artarctic Regions during the Voyage of the "Southern Cross", London, 1902. Bull. American Geog. Soc., vol. 35, pp. 572-573.

Some Notes on the Habits of *Cerapachys augustæ*. Psyche, vol. 10, pp. 205-209, 1 fig.

Extraordinary Females in three Species of Formica, with Remarks on Mutation in the Formicidae. Bull. American Mus. Nat. Hist., vol. 19, pp. 639-651, 3 figs.

Some New Gynandromorphous Ants, with a Review of the Previously Recorded Cases. Bull. American Mus. Nat. Hist., vol. 19, pp. 653-683, 11 figs.

1904

Translation of August Forel's "Ants and Some Other Insects. An inquiry into the Psychic Powers of these Animals with an Appendix on the Peculiarities of their Olfactory Sense". The Monist, vol. 14, Nos. 1 & 2, Oct. & Jan. 1903-1904, pp. 33-36, Reprinted as No. 56 of the Religion of Science Library. Chicago, 1904, pp. 1-49.

Three New Genera of Inquiline Ants from Utah and Colorado. Bull. American Mus. Nat. Hist., vol. 20, pp. 1-17, 2 pls.

Review of C. W. Dodge's "General Zoology Practical, Systematic and Comparative". Science, n.s., vol. 18, pp. 824-825.

Review of E. E. Austen's "A Monograph of the Tsetse-flies (Genus Glossima, Westwood) based on the Collection in the British Museum". Bull. American Geog. Soc., vol. 35, pp. 573-575.

Woodcock Surgery. Science, n.s., vol. 19, No. 478, pp. 347-350.

The Obligations of the Student of Animal Behavior. The Auk, vol. 21, pp. 251-255.

A Crustacean-eating Ant (*Leptogenys* (*Lobopelta*) *elongata* Buckley). Biol. Bull., vol. 6, pp. 251-259, 1 fig.

The American Ants of the Subgenus Colobopsis. Bull. American Mus. Nat. Hist., vol. 20, pp. 139-158, 7 figs.

Dr. Castle and the Dzierzon Theary. Science, n.s., vol. 19, pp. 587-591.

The Ants of North Carolina. Bull. American Mus. Nat. Hist., vol. 20, pp. 299-306.

On the Pupation of Ants and the Feasibility of Establishing the Guatemalan Kelep, or Cotton-Weevil Ant in the United States. Science, n.s., vol. 20, pp. 437-440.

Social Parasitism Among Ants. American Mus. Journ., vol. 4, pp. 74-75.

A New Type of Social Parasitism Among Ants. Bull. American Mus. Nat. Hist., vol. 20, pp. 347- 375.

The Phylogeny of the Termites. Biol. Bull., vol. 8, pp. 29-37.

Some Further Comments on the Guatemalan Boll Weevil Ant. Science, n.s., vol. 20, pp. 766-768.

1905

An Interpretation of the Slave-making Instincts in Ants. Bull. American Mus. Nat. Hist., vol. 21, pp. 1-16.

Ethology and the Mutation Theory. Science, n.s., vol. 21, pp. 535-540.

The Ants of the Bahamas, with a List of the Known West Indian Species. Bull. American Mus. Nat. Hist., vol. 21, pp. 79-135, 1 pl., 23 figs.

Some Remarks on Temporary Social Parasitism and the Phylogeny of Slavery among Ants. Biol. Centralbl., vol. 25, pp. 637-644.

New Species of Formica. Bull. American Mus. Nat. Hist., vol. 21, pp. 267-274.

Ants from Catalina Island, California. Bull. American Mus. Nat. Hist., vol. 20, pp. 269-271. Same in Bull. Southern California Acad. Sci., vol. 4, 1905, pp. 60-63.

The Structure of Wings. Bird Lore, vol. 7, pp. 257-262.

A New Myzostoma, Parasitic in a Starfish. Biol. Bull., vol. 8, pp. 75-78, 1 fig.

How the Queens of the Parasitic and Slave-making Ants Establish their Colonies. American Mus. Journ., vol. 5, pp. 144-148.

The North American Ants of the Genus Dolichoderus. Bull. American Mus. Nat. Hist., vol. 21, pp. 305-319, 2 pls., 3 figs.

The North American Ants of the Genus Liometopum. Bull. American Mus. Nat. Hist., vol. 21, pp. 321-333, 3 figs.

An Annotated List of the Ants of New Jersey. Bull. American Mus. Nat. Hist., vol. 21, pp. 371-403, 4 figs.

Ants from the Summit of Mount Washington. Psyche, vol. 12, pp. 111-114.

Worker Ants with Vestiges of Wings. Bull. American Mus. Nat. Hist., vol. 21, pp. 405-408, 1 pl.

Dr. O. F. Cook's "Social Organization and Breeding Habits of the Cotton-Protecting Kelep of Guatemala". Science, n.s., vol. 21, pp. 706-710.

The Habits of the Tent-building Ant (*Crematogaster lineolata* Say). Bull. American Mus. Nat. Hist., vol. 22, pp. 1-18, 6 pls.

On the Founding of Colonies by Queen Ants, with Special Reference to the Parasitic and Slave-making Species. Bull. American Mus. Nat. Hist., vol. 22, pp. 33-105, 7 pls.

On Certain Tropical Ants Introduced into the United States. Entom. News, vol. 17, pp. 23-26.

The Ant Queen as a Psychological Study. Popular Science Monthly, vol. 68, pp. 291-299, 7 figs.

The Kelep Excused. Science, n.s., vol. 23, pp. 348-350.

Pelastoneurus nigrescens Wheeler, a synonym of *P. dissimilipes* Wheeler: a Correction. Entom. News, vol. 17, p. 69.

New Ants from New England. Psyche, vol. 13, pp. 38-41, 1 pl.

Fauna of New England. List of the Formicidae. Occas. Papers, Boston Soc. Nat. Hist., vol. 7, pp. 1-24.

A New Wingless Fly (*Puliciphora borinquenensis*) from Porto Rico. Bull. American Mus. Nat. Hist., vol. 22, pp. 267-271, 1 pl.

The Ants of Japan. Bull. American Mus. Nat. Hist., vol. 22, pp. 301-328, 1 pl., 2 figs.

The Ants of the Grand Canyon. Bull. American Mus. Nat. Hist., vol. 22, pp. 329-345.

The Ants of the Bermudas. Bull. American Mus. Nat. Hist., vol. 22, pp. 347-352, 1 fig.

Concerning *Monomorium destructor* Jerdon. Entom. News, vol. 17, p. 265.

An Ethological Study of Certain Maladjustments in the Relations of Ants to Plants. Bull. American Mus. Nat. Hist., vol. 22, pp. 403-418, 7 pls.

The Expedition to Colorado for Fossil Insects. The American Mus. Journ., vol. 6, pp. 199-203, 5 figs.

1907

A Collection of Ants from British Honduras. Bull. American Mus. Nat. Hist., vol. 23, pp. 271-277, 2 pls.

The Polymorphism of Ants, with an Account of Some Singular Abnormalities due to Parasitism. Bull. American Mus. Nat. Hist., vol. 23, pp. 1-93, 6 pls.

Notes on a New Guest Ant, *Leptothorax glacialis,* and the varieties of *Myrmica brevinodis* Emery. Bull. Wisconsin Nat. Hist. Soc., vol. 5, pp. 70-83.

On Certain Modified Hairs Peculiar to the Ants of Arid Regions. Biol. Bull., vol. 13, pp. 185-202, 14 figs.

The Fungus-growing Ants of North America. Bull. American Mus. Nat. Hist., vol. 23, pp. 669-807, 5 pls., 31 figs.

The Origin of Slavery Among Ants. Popular Science Monthly, vol. 71, pp. 550-559.

Pink Insect Mutants. American Naturalist, vol. 41, pp. 773-780.

1908

The Ants of Porto Rico and the Virgin Islands. Bull. American Mus. Nat. Hist., vol. 24, pp. 117-158, 2 pls., 4 figs.

Comparative ethology of the European and North American Ants. Journ. Psychol. u. Neurol., vol. 13, pp. 404-435, 2 pls., 5 figs.

The Ants of Jamaica. Bull. American Mus. Nat. Hist., vol. 24, pp. 159-163.

Ants from Moorea, Society Islands. Bull. American Mus. Nat. Hist., vol. 24, pp. 165-167.

Ants from the Azores. Bull. American Mus. Nat. Hist., vol. 24, pp. 169-170.

Vestigial Instincts in Insects and Other Animals. American Journ. Psychol., vol. 19, pp. 1-13.

Studies on Myrmecophiles. II. Hetaerius. Journ. New York Entom. Soc., vol. 16, pp. 135-143.

The Ants of Texas, New Mexico and Arizona. I. Bull. American Mus. Nat. Hist., vol. 24, pp. 399-485, 2 pls.

Honey Ants, with a Revision of the American Myrmecocysti. Bull. American Mus. Nat. Hist., vol. 24, pp. 345-397, 28 figs.

The Polymorphism of Ants. Ann. Ent. Soc. America, vol. 1, pp. 39-69, 1 pl.

Studies on Myrmecophiles. I. Cremastochilus. Journ. New York Entom. Soc., vol. 16, pp. 68-79, 3 figs.

The Ants of Casco Bay, Maine, with Observations on Two Races of *Formica sanguinea* Latreille. Bull. American Mus. Nat. Hist., vol. 24, pp. 619-645.

A European Ant (*Myrmica levinodis*) Introduced into Massachusetts. Journ. Econ. Entom, vol. 1, pp. 337-339.

Studies on Myrmecophiles. III. Microdon. Journ. New York Entom. Soc., vol. 16, pp. 202-213, 1 fig.

1909

A Small Collection of Ants from Victoria, Australia. Journ. New York Entom. Soc., vol. 17, pp. 25-29.

Ants collected by Professor Filippo Silvestri in Mexico. Bull. Lab. Zool. Gen. e. Agrar. R. Scuola Sup. Agric. Portici, vol. 3, pp. 228-238.

Review of P. Deegener's "Die Metamorphose der Insekten". Science, n.s., vol. 29, pp. 384-387.

Predarwinian and Postdarwinian Biology. Popular Science Monthly, vol. 74, pp. 381-385.

Ants Collected by Professor Filippo Silvestri in the Hawaiian Islands. Boll. Lab. Zool. Gen. e. Agrar. R. Scuola Sup. Agric. Portici, vol. 3, pp. 269-272.

Ants of Formosa and the Philippines. Bull. American Mus. Nat. Hist., vol. 26, pp. 333-345.

A Decade of North American Formicidae. Journ. New York Entom. Soc., vol. 17, pp. 77-90.

A New Honey Ant from California. Journ. New York Entom. Soc., vol. 17, pp. 98-99.

The Ants of Isle Royale, Michigan. Report Michigan Geol. Surv., 1908, pp. 325-328.

Review of A. D. Hopkins "The Genus Dendroctonus". Journ. Econ. Entom., vol. 2, pp. 471-472.

Observations on Some European Ants. Journ. New York Entom. Soc., vol. 17, pp. 172-187, 2 figs.

1910

Ants: Their Structure, Development and Behavior. (Columbia University Biological Series vol. 9) Columbia Univ. Press, New York, 1910, pp. xxv+663, 286 figs.

Two New Myrmecophilous Mites of the Genus Antennophorus. Psyche, vol. 17, pp. 1-6, 2 pls.

Review of W. Dwight Pierce's "A Monographic Revision of the Twisted Winged Insects Comprising the Order Strepsiptera Kirby". Journ. Econ. Entom., vol. 3, pp. 252-253.

Small Artificial Ant-Nests of Novel Patterns. Psyche, vol. 17, pp. 73-75, 1 fig.

Review of H. Friese's "Die Bienen Afrikas". Science, n.s., vol. 31, pp. 580-582.

The Effects of Parasitic and Other Kinds of Castration in Insects. Journ. Exper. Zoöl., vol. 8, pp. 377-438, 8 figs.

Colonies of Ants (*Lasius neoniger* Emery) Infested with *Laboulbenia formicarum* Thaxter. Psyche, vol. 17, pp. 83-86.

An Aberrant Lasius from Japan. Biol. Bull., vol. 19, pp. 130-137, 2 figs.

Three New Genera of Myrmicine Ants from Tropical America. Bull. American Mus. Nat. Hist., vol. 28, pp. 259-265, 3 figs.

A New Species of Aphomomyrmex from Borneo. Psyche, vol. 17, pp. 131-135, 1 fig.

A Gynandromorphous Mutillid. Psyche, vol. 17, pp. 186-190, 1 fig.

The North American Forms of *Lasius umbratus* Nylander. Psyche, vol. 17, pp. 235-243.

The North American Forms of *Camponotus fallax* Nylander. Journ. New York Entom. Soc., vol. 18, pp. 216-232.

The North American Ants of the Genus Camponotus Mayr. Ann. New York Acad. Sci., vol. 20, pp. 295-354.

A List of New Jersey Formicidae in J. B. Smith's Report of the Insects of New Jersey, 1910, pp. 655-663.

1911

The Ant-Colony as an Organism. Journ. Morph., vol. 22, pp. 307-325.

Additions to the Ant-fauna of Jamaica. Bull. American Mus. Nat. Hist., vol. 30, pp. 21-29.

Review of K. Escherich's "Termitenleben auf Ceylon". Science, n.s., vol. 33, pp. 530-534.

On *Melanetærius infernalis* Fall. Psyche, vol. 18, pp. 112-114, 1 fig.

Two Fungus-Growing Ants from Arizona. Psyche, vol. 18, pp. 93-101, 2 figs.

A New Camponotus from California. Journ. New York Entom. Soc., vol. 19, pp. 96-98.

Three Formicid Names which have been Overlooked. Science, n.s., vol. 33, pp. 858-860.

Ants Collected in Grenada, W.I., by Mr. C. T. Brues. Bull. Mus. Comp. Zoöl., vol. 54, pp. 167-172.

Review of v. Kirchner's "Blumen und Insekten". Science, n.s., vol. 34, pp. 57-58.

A List of the Type Species of the Genera and Subgenera of Formicidae. Ann. New York Acad. Sci., vol. 21, pp. 157-175.

Literature for 1910 on the Behavior of Ants, their Guests and Parasites. Journ. Anim. Behavior, vol. 1, pp. 413-429.

Notes on the Myrmecophilous Beetles of the Genus Xenodusa, with a description of the Larva of *X. cava* Leconte. Journ. New York Entom. Soc., vol. 19, pp. 163-169.

Pseudoscorpions in Ant Nests. Psyche, vol. 18, pp. 166-168.

Descriptions of Some New Fungus-growing Ants from Texas, with Mr. C. G. Hartman's Observations on their Habits. Journ. New York Entom. Soc., vol. 19, pp. 245-255, 1 pl.

An Ant-nest Coccinellid (*Brachyacantha 4-punctata* Mels.). Journ. New York Entom. Soc., vol. 19, pp. 169-174, 1 fig.

Miastor Larvae in Connecticut. Journ. New York Entom. Soc., vol. 19, p. 201.

Lasius (*Acanthomyops*) *claviger* in Tahiti. Journ. New York Entom. Soc., vol. 19, p. 262.

A Desert Cockroach. Journ. New York Entom. Soc., vol. 19, pp. 262-263.

Three New Ants from Mexico and Central America. Psyche, vol. 18, pp. 203-208.

Insect Parasitism and its Peculiarities. Popular Science Monthly, vol. 79, pp. 431-449.

1912

The Ants of Guam. Journ. New York Entom. Soc., vol. 20, pp. 44-48.

New Names for Some North American Ants of the Genus Formica. Psyche, vol. 19, p. 90.

Notes on a Mistletoe Ant. Journ. New York Entom. Soc., vol. 20, pp. 130-133.

Notes About Ants and Their Resemblance to Man. Nat. Geogr. Mag., vol. 23, pp. 731-766, 34 figs.

Additions to our Knowledge of the Ants of the Genus Myrmecocystus Wesmael. Psyche, vol. 19, pp. 172-181, 1 fig.

The Male of *Eciton vagans* Olivier. Psyche, vol. 19, pp. 206-207.

Review of J. H. Comstock's "Spider Book". Science, n.s., vol. 36, pp. 745-746.

1913

Notes on the Habits of Some Central American Stingless Bees. Psyche, vol. 20, pp. 1-9.

A Giant Coccid from Guatemala. Psyche, vol. 20, pp. 31-33, 1 fig.

Review of Sladen's "The Humble Bee, its Life History and How to Domesticate it". Science, n.s., vol. 37, pp. 180-182.

A Revision of the Ants of the Genus Formica (L.) Mayr. Bull. Mus. Comp. Zoöl., vol. 53, pp. 379-565, 10 figs.

Observations on the Central American Acacia Ants. Trans. 2nd Internat. Entom. Congress, Oxford, 1912, vol. 2, pp. 109-139.

Hymenoptera II; Ants (Formicidae). Rec. Indian Mus., vol. 8, pp. 233-237.

Corrections and Additions to the "List of the Type Species of Genera and Subgenera of Formicidae". Ann. New York Acad. Sci., vol. 23, pp. 77-83.

Ants Collected in Georgia by Mr. J. C. Bradley and Mr. W. T. Davis. Psyche, vol. 20, pp. 112-117.

The Ants of Cuba. Bull. Mus. Comp. Zoöl., vol. 54, pp. 477-505.

Ants Collected in the West Indies. Bull. American Mus. Nat. Hist., vol. 32, pp. 239-244.

A Solitary Wasp (*Aphilanthops frigidus* F. Smith) that Provisions its Nest with Queen Ants. Journ. Anim. Behavior, vol. 3, pp. 374-387.

1914

The Ants of the Baltic Amber. Schrift. Physik-ökonom. Gesellsch. Königsberg, vol. 55, pp. 1-142, 66 figs.

The Ants of Haiti. Bull. American Mus. Nat. Hist., vol. 33, pp. 1-61, 27 figs. (with W. M. Mann).

Gynandromorphous Ants Described During the Decade 1903-1913. American Naturalist, vol. 48, pp. 49-56.

Ants Collected by Mr. W. M. Mann in the State of Hidalgo, Mexico. Journ. New York Entom. Soc., vol. 22, pp. 37-61.

Review of O. M. Reuter's "Lebensgewohnheiten und Instinkte der Insekten bis zum Erwachen der sozialen Instinkte". Science, n.s., vol. 39, pp. 69-71.

Formica exsecta in Japan. Psyche, vol. 21, pp. 26-27.

Notes on the Habits of Liomyrmex. Psyche, vol. 21, pp. 76-77.

Ants and Bees as Carriers of Pathogenic Microörganisms. American Journ. Trop. Diseases and Prevent. Med., vol. 2, pp. 160-168.

The American Species of Myrmica Allied to *M. rubida* Latreille. Psyche, vol. 21, pp. 118-122, 1 fig.

New and Little Known Harvesting Ants of the Genus Pogonomyrmex. Psyche, vol. 21, pp. 149-157.

1915

The Luminous Organ of the New Zealand Glow-worm. Psyche, vol. 22, pp. 36-43, 1 pl. (with F. X. Williams).

A New Linguatulid from Ecuador. Rept. First Harvard Exped. to South America (1913), appendix, pp. 207-208, 1 pl.

Neomyrma *versus* Oreomyrma, a Correction. Psyche, vol. 22, p. 50.

Some Additions to the North American Ant-fauna. Bull. American Mus. Nat. Hist., vol. 34, pp. 389-421.

The Australian Honey-Ants of the Genus Leptomyrmex Mayr. Proc. American Acad. Arts and Sci., vol. 51, pp. 255-286, 12 figs.

Paranomopone, a New Genus of Ponerine Ants from

Queensland. Psyche, vol. 22, pp. 117-120, 1 pl.

Hymenoptera. In "Scientific Notes on an Expedition into the North-western Regions of South Australia". Trans. Roy. Soc. South Australia, vol. 39, pp. 805-823, 3 pls.

A New Bog-inhabiting Variety of *Formica fusca* L. Psyche, vol. 22, pp. 203-206.

Two New Genera of Myrmicine Ants from Brazil. Bull. Mus. Comp. Zoöl., vol. 59, pp. 45-54, 2 pls.

On the Presence and Absence of Cocoons among Ants, the Nest-spinning habits of the Larvae and the Significance of the Black Cocoons Among Certain Australian Species. Ann. Entom. Soc. America, vol. 8, pp. 323-342, 5 figs.

1916

The Marriage-flight of a Bull-dog Ant (*Myrmecia sanguinea* F. Smith). Journ. Anim. Behavior, vol. 6, pp. 70-73.

Formicoidea. In "The Hymenoptera of Connecticut". Connecticut State Geol. & Nat. Hist. Surv., Bull. 22, pp. 577-601.

Prodiscothyrea, a New Genus of Ponerine Ants from Queensland. Trans. Roy. Soc. South Australia, vol. 40, pp. 33-37, 1 pl.

The Australian Ants of the Genus Onychomyrmex Emery. Bull. Mus. Comp. Zoöl., vol. 60, pp. 45-54, 2 pls.

Ants Collected in British Guiana by the Expedition of the American Museum of Natural History during 1911. Bull. American Mus. Nat. Hist., vol. 35, pp. 1-14.

The Ants of the Phillips Expedition to Palestine during 1914. Bull. Mus. Comp. Zoöl., vol. 60, pp. 167-174, 1 fig. (with W. M. Mann).

Ants Collected in Trinidad by Professor Roland Thaxter, Mr. F. W. Urich and Others. Bull. Mus. Comp. Zoöl., vol. 60, pp. 323-330, 1 fig.

Jean-Henri Fabre. Journ. Anim. Behavior, vol. 6, pp. 74-80.

Four New and Interesting Ants from the Mountains of Borneo and Luzon. Proc. New England Zoöl. Club, vol. 6, pp. 9-18, 4 figs.

Review of H. St. J. K. Donisthorpe's "British Ants, Their Life-History and Classification". Science, n.s., vol. 43, pp. 316-318.

Some New Formicid Names. Psyche, vol. 23, p. 40.

Notes on Some Slave Raids of the Western Amazon Ant (*Polyergus breviceps* Emery). Journ. New York Entom. Soc., vol. 24, pp. 107-118.

The Australian Ants of the Genus Aphaenogaster Mayr. Trans. Roy. Soc. South Australia, vol. 40, pp. 213-223, 2 pls.

The Mountain Ants of Western North America. Proc. American Acad. Arts & Sci., vol. 52, pp. 457-569.

Note on the Brazilian Fire Ant, *Solenopsis sævissima* F. Smith. Psyche, vol. 23, pp. 142-143.

An Anomalous Blind Worker Ant. Psyche, vol. 23, pp. 143-145, 2 figs.

Questions of Nomenclature Connected with the Ant Genus Lasius and its Subgenera. Psyche, vol. 23, pp. 168-173.

Two New Ants from Texas and Arizona. Proc. New England Zoöl. Club, vol. 6, pp. 29-35, 2 figs.

A Phosphorescent Ant. Psyche, vol. 23, pp. 173-174.

An Indian Ant Introduced into the United States. Journ. Econ. Entom., vol. 9, pp. 566-569, 1 fig.

The Australian Ant-Genus Myrmecorhynchus Ern. André and its Position in the Subfamily Camponotinae. Trans. Roy. Soc. South Australia, vol. 41, pp. 14-19.

Ants Carried in a Floating Log from the Brazilian Mainland to San Sebastian Island. Psyche, vol. 23, pp. 180-183.

1917

A New Malayan Ant of the Genus Prodiscothyrea. Psyche, vol. 24, pp. 29-30.

A List of Indiana Ants. Proc. Indiana Acad. Sci., 1917, pp. 460-466.

The North American Ants Described by Asa Fitch. Psyche, vol. 24, pp. 26-29.

The Ants of Alaska. Bull. Mus. Comp. Zoöl., vol. 61, pp. 15-22.

The Phylogenetic Development of Apterous and Subapterous Castes in the Formicidae. Proc. Nat. Acad. Sci., vol. 3, pp. 109-117.

The Synchronic Behavior of Phalangidae. Science, n.s., vol. 45, pp. 189-190.

Jamaican Ants Collected by Prof. C. T. Brues. Bull. Mus. Comp. Zoöl., vol. 61, pp. 457-471, 2 pls., 3 figs.

The Temporary Social Parasitism of *Lasius subumbratus* Viereck. Psyche, vol. 24, pp. 167-176.

Notes on the Marriage Flights of Some Sonoran Ants. Psyche, vol. 24, pp. 177-180.

The Pleometrosis of Myrmecocystus. Psyche, vol. 24, pp. 180-182.

1918

The Ants of the Genus Opisthopsis Emery. Bull. Mus. Comp. Zoöl., vol. 62, pp. 343-362, 3 pls.

The Australian Ants of the Ponerine Tribe Cerapachyini. Proc. American Acad. Arts & Sci., vol. 53, pp. 215-265.

Ants Collected in British Guiana by Mr. C. William Beebe. Journ. New York Entom. Soc., vol. 26, pp. 23-28.

A Great Opportunity for Applied Science. Harvard Alumni Bulletin, vol. 20, pp. 264-266.

A Study of Some Ant Larvae, with a Consideration of the Origin and Meaning of the Social Habit among Insects. Proc. American Philos. Soc., vol. 57, pp. 293-343, 12 figs.

Vermileo comstocki sp. nov., an Interesting Leptid fly from California. Proc. New England Zoöl. Club, vol. 6, pp. 83-84.

Quick Key to a Knowledge of Common Insects: Review of F. E. Lutz's "Field Book of Insects". American Mus. Journ., vol. 18, pp. 381-382.

Introduction to Phil and Nellie Rau's "Wasp Studies Afield". Princeton Univ. Press, 1918, pp. 1-8.

1919

Two Gynandromorphous Ants. Psyche, vol. 26, pp. 1-8, 2 figs.

The Parasitic Aculeata, A Study in Evolution. Proc. American Philosoph. Soc., vol. 58, pp. 1-40.

The Ants of Borneo. Bull. Mus. Comp. Zoöl., vol. 63, pp. 43-157.

A New Subspecies of *Aphænogaster treatæ* Forel. Psyche, vol. 26, p. 50.

The Ant Genus Lordomyrma Emery. Psyche, vol. 26, pp. 97-106, 4 figs.

A New Paper-making Crematogaster from the Southeastern United States. Psyche, vol. 26, pp. 107-112.

The Ants of Tobago Island. Psyche, vol. 26, p. 113.

The Ant Genus Metapone Forel. Ann. Entom. Soc. America, vol. 12, pp. 173-191, 7 figs.

The Ants of the Galapagos Islands. Proc. California Acad. Sci., vol. 2, pp. 259-297.

The Ants of Cocos Island. Proc. California Acad. Sci., vol. 2, pp. 299-308.

A Singular Neotropical Ant (*Pseudomyrma filiformis* Fabricius). Psyche, vol. 26, pp. 124-131, 3 figs.

The Phoresy of Antherophagus. Psyche, vol. 26, pp. 145-152, 1 fig.

1920

The Termitodoxa, or Biology and Society. Scientific Monthly, vol. 10, pp. 113-124.

The Subfamilies of Formicidae, and Other Taxonomic Notes. Psyche, vol. 27, pp. 46-55, 3 figs.

Euponera gilva Roger, a Rare North American Ant. Psyche, vol. 27, pp. 69-72. (with F. M. Gaige).

Charles Gordon Hewitt. Journ. Econ. Entom., vol. 13, pp. 262-263.

The Feeding Habits of Pseudomyrmine and Other Ants. Trans. American Philos. Soc., vol. 22, pp. 235-279, 5 pls. (with I. W. Bailey).

Review of Bouvier "La Vie Psychique des Insectes". Science, n.s., vol. 52, pp. 443-446.

1921

A New Case of Parabiosis and the Ant Gardens of British Guiana. Ecology, vol. 2, pp. 89-103, 3 figs.

The Organization of Research. Science, n.s., vol. 53, pp. 53-67.

Chinese Ants. Bull. Mus. Comp. Zoöl., vol. 64, pp. 529-547.

Observations on Army Ants in British Guiana. Proc. American Acad. Arts & Sci., vol. 56, pp. 291-328, 10 figs.

Professor Emery's Subgenera of the Genus Camponotus Mayr. Psyche, vol. 28, pp. 16-19.

A Study of Some Social Beetles in British Guiana and of Their Relations to the Ant-plant, Tachigalia. Zoölogica, New York, vol. 3, pp. 35-126, 5 pls., 12 figs.

The Tachigalia Ants. Zoölogica, New York, vol. 3, pp. 137-168, 4 figs.

Notes on the Habits of European and North American

Cucujidae. Zoölogica, New York, vol. 3, pp. 173-183.

On Instincts. Journ. Abnorm. Psych., vol. 15, pp. 295-318.

Chinese Ants Collected by Prof. C. W. Howard. Psyche, vol. 28, pp. 110-115, 2 figs.

Vespa arctica Rohwer, a Parasite of *Vespa diabolica* De Saussure. Psyche, vol. 28, pp. 135-144, 3 figs. (with L. H. Taylor).

1922

Ants of the Genus Formica in the Tropics. Psyche, vol. 19, pp. 174-177.

The Ants of Trinidad. American Mus. Novitates, No. 45, pp. 1-16, 1 fig.

A New Genus and Subgenus of Myrmicinae from Tropical America. American Mus. Novitates, No. 46, pp. 1-6, 2 figs.

Report on the Ants of the Belgian Congo. Bull. American Mus. Nat. Hist., vol. 45, pp. 1-1139. (with the collaboration of J. Bequaert, I. W. Bailey, F. Santschi, and W. M. Mann).

I. On the Distribution of the Ants of the Ethiopian and Malagasy Regions, pp. 13-37.

II. The Ants Collected by the American Museum Congo Expedition, pp. 39-270.

VII. Keys to the Genera and Subgenera of Ants, pp. 631-710.

VIII. A Synonymic List of the Ants of the Ethiopian Region, pp. 711-1004.

IX. A Synonymic List of the Ants of the Malagasy Region, pp. 1005-1055.

Observations on *Gigantiops destructor* Fabricius, and Other Leaping Ants. Biol. Bull., vol. 42, pp. 185-201, 3 figs.

Neotropical Ants of the Genera Carebara, Tranopelta and Tranopeltoides, New Genus. American Mus. Novitates, No. 48, pp. 1-14, 3 figs.

The Mating of Diacamma. Psyche, vol. 29, pp. 203-211, 4 figs. (with J. W. Chapman).

1923

The Dry-Rot of Our Academic Biology. Science, n.s., vol. 57, pp. 61-71.

A Singular Habit of Sawfly Larvae. Psyche, vol. 30, pp. 9-13, 1 fig. (with W. M. Mann).

Formicidae from Easter Island and Juan Fernandez. In

"The Natural History of Juan Fernandez and Easter Island". Ed. by Dr. Carl Skottsberg, vol. 3, pp. 317-319.

Report on the ants Collected by the Barbados-Antigua Expedition from the University of Iowa in 1918. Univ. of Iowa Studies Nat. Hist., vol. 10, pp. 3-9.

Social Life Among the Insects. Scientific Monthly, vol. 14, 15 and 16, June 1922—March 1923: 14, pp. 497-525; 15, pp. 67-88; 119-131; 235-256; 320-337; 385-404; 527-541; 16, pp. 5-33; 159-176; 312-329.

Chinese Ants Collected by Professor S. F. Light and Professor A. P. Jacot. American Mus. Novitates, No. 69, pp. 1-6.

Formicidae. Wissenschaftliche Ergebnisse der Schwedischen entomologischen Reise des Herrn Dr. A. Roman in Amazonas 1914-1915. Arkiv. f. Zool., vol. 15, No. 7, pp. 1-6.

Social Life Among the Insects, pp. 3+375. Harcourt, Brace & Co., New York.

Ants of the Genera Myopias and Acanthoponera. Psyche, vol. 30, pp. 175-192, 5 figs.

The Occurrence of Winged Females in the Ant Genus Leptogenys Roger, with Descriptions of New Species. American Mus. Novitates, No. 90, 16 pp., 5 figs.

1924

Two Extraordinary Larval Myrmecophiles from Panama. Proc. Nat. Acad. Sci., vol. 10, pp. 237-244, 3 figs.

A Gynandromorph of *Tetramorium guineënse* Fabr. Psyche, vol. 31, pp. 136-137, 1 fig.

Hymenoptera of the Siju Cave, Garo Hills, Assam. Records of the Indian Museum, vol. 26, Pt. 1, pp. 123-125.

On the Ant-genus Chrysapace Crawley. Psyche, vol. 31, pp. 224-225.

The Formicidae of the Harrison Williams Expedition to the Galapagos Islands. Zoölogica, New York, vol. 5, pp. 101-122, 8 figs.

Ants of Krakatau and Other Islands in the Sunda Strait. Treubia, vol. 5, pp. 1-20, 1 map.

1925

Courtship of the Calobates; The Kelep Ant and the Courtship of its Mimic *Cardiacephala myrmex*. Journ. Heredity, vol. 15, pp. 485-495, 8 figs.

A New Guest-Ant and other new Formicidae from Barro

Colorado Island, Panama. Biol. Bull., vol. 49, pp. 150-181, 8 figs.

The Ants of the Philippine Islands. Part I. Dorylinae and Ponerinae. Philippine Journ. Sci., vol. 28, pp. 47-73, 2 pls. (with J. W. Chapman).

Neotropical Ants in the Collections of the Royal Museum of Stockholm. Part. I. Ark. Zool., vol. 17A, No. 8, pp. 1-55.

Zoölogical Results of the Swedish Expedition to Central Africa 1921. Insecta 10, Formicidae. Ark. Zool., vol. 17A, No. 25, pp. 1-3.

The Finding of the Queen of the Army ant *Eciton hamatum* Fabricius. Biol. Bull., vol. 49, pp. 139-149, 8 figs.

L'Evolution des Insectes Sociaux. Rev. Scient., vol. 63, pp. 548-557, 6 figs.

Carlo Emery. Entom. News, vol. 36, pp. 318-320.

1926

Les Sociéteés d'Insectes: leur origine, leur évolution. Doin, Paris, 468 pp.

Translation of an unpublished manuscript of Réaumur, "The Natural History of Ants". 280 pp. New York, A. A. Knopf, 1926.

Social Habits of Some Canary Island Spiders. Psyche, vol. 33, pp. 29-31.

A New Word for an Old Thing. (Review of Watson's "Behaviorism"). Quarterly Rev. of Biol., vol. 1, pp. 439-443.

Emergent Evolution and the Social. Science, n.s., vol. 44, pp. 433-440.

Ants of the Balearic Islands. Folia Myrmecologica et Termitologica, vol. 1, pp. 1-6.

1927

The Occurrence of *Formica fusca* Linné in Sumatra. Psyche, vol. 34, pp. 40-41.

Burmese Ants Collected by Professor G. E. Gates. Psyche, vol. 34, pp. 42-46.

Chinese Ants Collected by Professor S. F. Light and Professor N. Gist Gee. American Mus. Novitates, No. 255, pp. 1-12.

The Physiognomy of Insects. Quarterly Rev. of Biol., vol. 2, pp. 1-36.

Ants Collected by Professor F. Silvestri in Indochina.

Boll. Lab. Zoöl. Gen. Agrar. Portici, vol. 20, pp. 83-106, 9 figs.

Ants of the Genus Amblyopone Erichson. Proc. American Acad. Arts & Sci., vol. 62, pp. 1-29, 8 figs.

A Few Ants from China and Formosa. American Mus. Novitates, No. 259, pp. 1-4.

The Ants of the Canary Islands. Proc. American Acad. Arts & Sci., vol. 62, pp. 93-120, 2 pls.

The Ants of Lord Howe and Norfolk Island. Proc. American Acad. Arts & Sci., vol. 62, pp. 121-153, 12 figs.

Carl Akeley's Early Work and Environment. Natural History, vol. 27, pp. 133-141, 5 figs.

The Occurrence of the Pavement Ant (*Tetramorium cæspitum*) in Boston. Psyche, vol. 34, pp. 164-165.

Conserving the Family, a Review of three books on Human Reproduction and the Family. Journ. Hered., vol. 18, pp. 119-120.

Emergent Evolution and the Social. Psyche Miniatures, Gen. Ser. No. 11, London. Kegan Paul etc.

1928

Foibles of Insects and Men. xxvi+217+xi pp. A. Knopf, New York.

The Social Insects, their Origin and Evolution. 378 pp. London. Kegan Paul etc.

Ants Collected by Prof. F. Silvestri in China. Boll. Lab. Zoöl. Gen. Agrar., Portici, vol. 22, pp. 3-38, 3 figs.

The Evolution of Ants. In Frances Mason's "Creation by Evolution", pp. 210-224, New York, MacMillan.

A New Species of Probolomyrmex from Java. Psyche, vol. 35, pp. 7-9, 1 fig.

Ants of Nantucket Island, Mass. Psyche, vol. 35, pp. 10-11.

Mermis Parasitism and Intercastes among Ants. Journ. Exper. Zoöl., vol. 50, pp. 165-237, 17 figs.

Ants Collected by Prof. F. Silvestri in Japan and Korea. Boll. Lab. Zool. Gen. Agrar. Portici, vol. 21, pp. 96-125.

Emergent Evolution and the Development of Societies. 80 pp. New York, W. W. Norton.

Zatapinoma, a new Genus of Ants from India. Proc. New England Zoöl. Club, vol. 10, pp. 19-23, 1 fig.

Societal Evolution in E. V. Coundry's "Human Biology and

Racial Welfare." Chapter VI, pp. 139-155. New York, Hoeber.

1929

Amazonian Myrmecophytes and their Ants. Zool. Anz. (Wasmann-Festband), vol. 82, pp. 10-39. (with J. C. Bequaert).

Two Interesting Neotropical Myrmecophytes (*Cordia nodosa* and *C. alliodora*). IV. Int. Congress of Entom., Ithaca, Aug. 1928, vol. 2, pp. 342-353.

Present Tendencies in Biological Theory. Scientific Monthly, vol. 28, pp. 97-109.

The Identity of the Ant-genera Gesomyrmex Mayr and Dimorphomyrmex Ernest André. Psyche, vol. 36, pp. 1-12, 1 fig.

Three New Genera of Ants from the Dutch East Indies. American Mus. Novitates, No. 349, pp. 1-8.

Ants Collected by Professor F. Silvestri in Formosa, The Malay Peninsula and the Philippines. Boll. Lab. Zool. Gen. Agrar., Portici, vol. 24, pp. 27-64.

Two Neotropical Ants Established in the United States. Psyche, vol. 36, pp. 89-90.

Note on Gesomyrmex. Psyche, vol. 36, pp. 91-92.

The Ant-Genus Rhopalomastix. Psyche, vol. 36, pp. 95-101.

A Camponotus Mermithergate from Argentina. Psyche, vol. 36, pp. 102-106.

Some Ants from China and Manchuria. American Mus. Novitates, No. 361, pp. 1-11.

Review of H. Friedmann's "The Cowbirds, A Study in the Biology of Social Parasitism". Science, n.s., vol. 70, pp. 70-73.

The Entomological Discoveries of John Hunter In "Exercises in Celebration of the Bicentenary of the Birth of John Hunter". New England Journ. Medicine, 1929, pp. 810-823.

Is *Necrophylus arenarius* Roux the larva of *Pterocroce storeyi* Withycombe? Psyche, vol. 36, pp. 313-320.

1930

History of the Bussey Institution In S. E. Morison's "Development of Harvard University since the Inauguration of

Pres. Elliot 1869-1929". Harvard Univ. Pres, 1930, pp. 508-517.

The Ant *Prenolepis imparis* Say. Ann. Entom. Soc. America, vol. 23, pp. 1-24, 3 figs.

A Second Note on Gesomyrmex. Psyche, vol. 37, pp. 35-40.

Two New Genera of Ants from Australia and the Philippines. Psyche, vol. 37, pp. 41-47.

Two Mermithergates of Ectatomma. Psyche, vol. 37, pp. 48-54.

Formosan Ants Collected by Dr. R. Takahashi. Proc. New England Zoöl. Club, vol. 11, pp. 93-106, 2 figs.

A New Emeryella from Panama. Proc. New England Zoöl. Club, vol. 12, pp. 9-13, 1 fig.

A New Parasitic Crematogaster from Indiana. Psyche, vol. 37, pp. 55-60.

Review of Auguste Forel's "Social World of the Ants". Journ. Soc. Psychol., vol. 1, pp. 170-177.

Philippine Ants of the Genus Aenictus with Descriptions of the Females of Two Species. Journ. New York Entom. Soc., vol. 38, pp. 193-212, 7 figs.

Ant-tree Notes from Rio Frio, Colombia. Psyche, vol. 37, pp. 107-117, 1 pl. (with P. J. Darlington, Jr.).

Demons of the Dust, A Study in Insect Behavior. xviii+378 pp. W. W. Norton, New York.

1931

New and Little-known Species of Macromischa, Croesomyrmex and Antillaemyrmex. Bull. Mus. Comp. Zoöl., vol. 72, pp. 3-34.

A List of the Known Chinese Ants. Peking Nat. Hist. Bull., 1930-31, vol. 5, pp. 53-81.

What is Natural History? Bull. Boston Soc. Nat. Hist., No. 59, pp. 3-12.

Concerning Some Ant Gynandromorphs. Psyche, vol. 38, pp. 80-85.

Neotropical Ants of the Genus Xenomyrmex Forel. Rev. Entom., vol. 1, pp. 129-139.

Hopes in the Biological Sciences. Proc. American Philos. Soc., vol. 70, pp. 231-239.

The Ant *Camponotus* (*Myrmepomis*) *sericeiventris* Guérin and its Mimic. Psyche, vol. 38, pp. 86-98.

1932

Ænictoteras chapmani gen. et sp. nov., an Extraordinary Ant-Guest from the Philippines. Liv. du Centenaire Soc. Entom. France, 1932, pp. 301-310.

Ants of the Marquesas Islands. Bull. 98, Bernice P. Bishop Mus., Honolulu, pp. 155-163.

Ants from the Society Islands. Pacific Ent. Survey Publ. 6, article 3, pp. 13-19.

A Cuban Vermileo. Psyche, vol. 38, pp. 166-169.

A List of the Ants of Florida. Journ. New York Entom. Soc., vol. 40, pp. 1-17.

How the Primitive Ants of Australia Start their Colonies. Science, n.s., vol. 76, pp. 532-533.

Some Attractions of the Field Study of Ants. Scientific Monthly, vol. 34, pp. 397-402.

An Australian Leptanilla. Psyche, vol. 39, pp. 53-58, 1 fig.

1933

Colony-founding among Ants, with an Account of Some Primitive Australian species. 179 pp. Harvard Univ. Press, Cambridge.

The Lamarck Manuscripts at Harvard. 202 pp. Harvard Univ. Press, Cambridge. (with T. Barbour).

Mermis Parasitism in Some Australian and Mexican Ants. Psyche, vol. 40, pp. 20-31.

Unusual Prey of Bembix. Psyche, vol. 40, pp. 57-59. (with R. Dow).

Formicidae of the Templeton Crocker Expedition 1933. Proc. California Acad. Sci., vol. (4), 21, pp. 57-64.

New Ants from China and Japan. Psyche, vol. 40, pp. 65-67.

A Second Parasitic Crematogaster. Psyche, vol. 40, pp. 83-86.

Translation of Maurice Bedel's "My Uncles, Louis Bedel and Henri d'Orbigny". Rev. Biol., vol. 8, pp. 325-330, 1 fig.

A New Species of Ponera and Other Records of Ants from the Marquesas Islands. Bernice P. Bishop Mus., Honolulu, Bull. 114, pp. 141-144.

An Ant New to the Fauna of the Hawaiian Islands. Proc. Hawaiian Entom. Soc., vol. 8, pp. 275-278, 1 fig.

A New Myrmoteras from Java. Proc. New England Zoöl. Club, vol. 13, pp. 72-75, 1 fig.

Three Obscure Genera of Ponerine Ants. American Mus. Novitates, No. 672, pp. 1-23.

1934

Some Aberrant Species of Camponotus (Colobopsis) from the Fiji Islands. Ann. Entom. Soc. America, vol. 27, pp. 415-424.

Ants from the Islands off the West Coast of Lower California and Mexico. Pan Pacific Entom., vol. 10, pp. 132-144.

A Second Revision of the Ants of the Genus Leptomyrmex Mayr. Bull. Mus. Comp. Zoöl., vol. 77, pp. 67-118.

A Revised List of the Ants of the Hawaiian Islands. Occasional Papers, Bernice P. Bishop Mus., Honolulu, vol. 10, No. 21, pp. 1-21.

A Study of the Ant Genera Novomessor and Veromessor. Proc. American Acad. Arts & Sci., vol. 69, pp. 341-387. (with W. S. Creighton).

Animal Societies (Biology & Society). Scientific Monthly, vol. 39, pp. 289-301.

Formicidae of the Templeton Crocker Expedition 1932. Proc. California Acad. Sci., vol. 21, pp. 173-181, 1 fig.

Contributions to the Fauna of Rottnest Island, West Australia. Journ. Roy. Soc. Western Australia, vol. 20, pp. 137-163.

An Australian Ant of the Genus Leptothorax Mayr. Psyche, vol. 41, pp. 60-62.

A Specimen of the Jamaican Vermileo. Psyche, vol. 41, pp. 236-237.

Introduction to O. E. Plath's "Bumblebees, their Life History, Habits and Economic Importance", pp. vii-x. MacMillan Co., New York.

Neotropical Ants Collected by Dr. Elisabeth Skwarra and Others. Bull. Mus. Comp. Zoöl., vol. 77, pp. 157-240.

Some Ants from the Bahama Islands. Psyche, vol. 41, pp. 230-232.

1935

Two New Genera of Myrmicine Ants from Papua and the Philippines. Proc. New England Zoöl. Club, vol. 15, pp. 1-9.

Observations on the Behavior of Animals during the Total

Solar Eclipse of August 31st, 1932 (Insects by Wheeler). Proc. American Acad. Arts & Sci., vol. 70, pp. 36-45.

The Ants of the Genera Belonopelta Mayr and Simopelta Mann. Rev. de Entomologia, vol. 5, pp. 8-19.

The Australian Ant-genus Mayriella Forel. Psyche, vol. 42, pp. 151-160.

A Checklist of the Ants of Oceania. Occasional Papers, Bernice P. Bishop Mus., Honolulu, vol. 11, pp. 1-56.

New Ants from the Philippines. Psyche, vol. 42, pp. 38-52.

Myrmecological Notes. Psyche, vol. 42, pp. 68-72.

Ants of the Genus Acropyga Roger with Description of a New Species. Journ. New York Entom. Soc., vol. 43, pp. 321-329.

1936

Binary Anterior Ocelli in Ants. Biol. Bull., vol. 70, pp. 185-192.

Entomology at Harvard University. From "Notes Concerning the History and Contents of the Museum of Comparative Zoölogy". Cambridge, 1936, pp. 22-32.

Ants from Hispaniola and Mona Island. Bull. Mus. Comp. Zoöl., vol. 80, pp. 196-211.

Notes on Some Aberrant Indonesian Ants of the Subfamily Formicinae. Tijdschr. Entom., vol. 79, pp. 217-221.

Review of Thomas Elliott Snyder's "Our Enemy the Termite". Psyche, vol. 43, pp. 27-29.

The Australian Ant-genus Froggattella Forel. American Mus. Novitates, No. 842, pp. 1-12.

A Singular Crematogaster from Guatemala. Psyche, vol. 43, pp. 40-48.

Ecological Relations of Ponerine and Other Ants to Termites. Proc. American Acad. Arts & Sci., vol. 71, pp. 159-243.

A Notable Contribution to Entomology. (Review of Tarlton Rayment's "A Cluster of Bees"). Quarterly Rev. Biol., vol. 11, pp. 337-341.

Ants from the Society, Austral, Tuamotu and Mangareva Islands. Occasional Papers, Bernice P. Bishop Mus., Honolulu, vol. 12, no. 18, pp. 1-17.

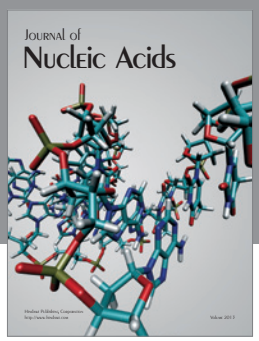
1937

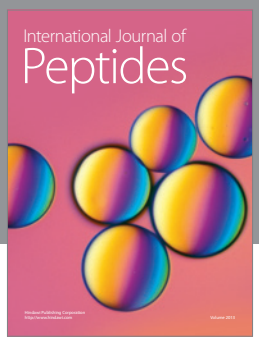
Additions to the Ant-fauna of Krakatau Island and Verlaten Island. Treubia, vol. 16, pp. 21-24.

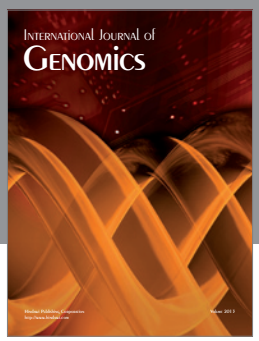
Ants mostly from the Mountains of Cuba. Bull. Mus. Comp. Zoöl., vol. 81, pp. 439-465.

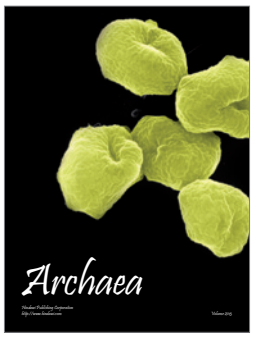
Mosaics and Other Anomalies Among Ants. 95 pp., 18 figs. Harvard University Press, Cambridge.

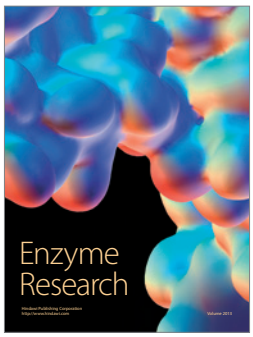
In collaboration with his former student, Dr. Wm. S. Creighton, Professor Wheeler had begun the preparation of a Handbook of North American Ants. Much of the preliminary manuscript for this volume was already finished and Dr. Creighton plans to carry the work to completion in the near future.

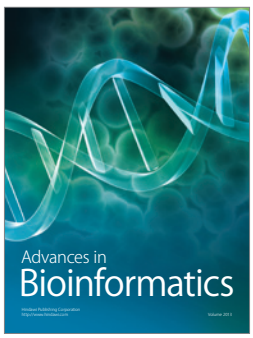


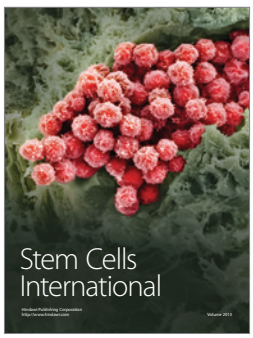


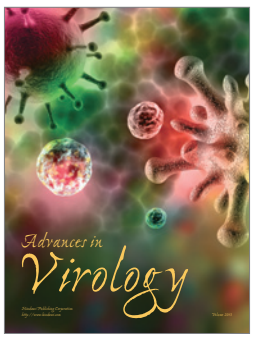


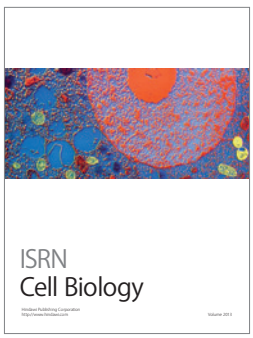


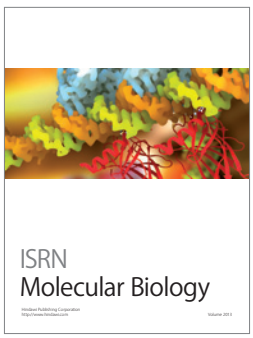


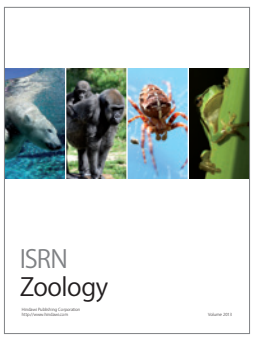


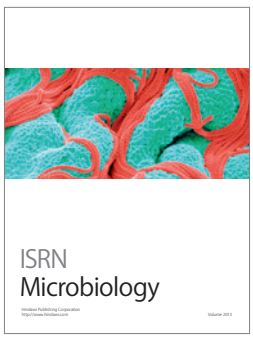












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