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Dos registros nuevos de pompilidos para Cuba (Hymenoptera)

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La familia Pompilidae está constituida por avispas cazadoras de arañas. La sistemática del grupo en Cuba presenta un nivel de conocimiento aceptable (Alayo, 1976); sin embargo, en las colecciones existen numerosos especímenes por estudiar. A continuación informo por primers vez para Cuba la presencia de *Poecilopompilus mixtus* (Fabr.) y *Aporinellus medianus* Banks. Las avispas estudiadas están depositadas en la colección del Museo National de Historia Natural de Cuba y en las colecciones particulars de P. Alayo y el autor.

Poecilopompilus mixtus

Distribucion.—Jamaica, St. Vincent (Rohwer, 1915) (como *Batazonus mundiformis* Rohwer), Dominica, St Croix, St Kitts, St Thomas, Puerto Rico (Wolcott, 1950) (como *B. mundiformis),* La Española, Cuba (nuevo registro).

Un ejemplar referido por Alayo (1976) a *Poecilopompilus* sp. pertenece a esta especie. Me veo obligado a reconocer un error de identificación, ya que los datos sobre la conducts de nidificación referidos por Sánchez y Genaro (1989) y Genaro (1993) para *P. mundus,* pertenecen a *P. mixtus.*

Material Examinado. — Hembras: Isla de Pines, xii.68; Güines, La Habana, xii.86 *(n* = 2), xii.88, 28.xii.92 *(n* = 2), col. J.A. Genaro. Machos: Sierra de Las Casas, Isla de Pines, 19.x.74, col. L.F. de Armas; Jovellanos, Matanzas, v.88, col. J.A. Genaro; Güines, xii.86, col. J.A. Genaro.

Aporinellus medianus

Distribucion. — California, Wyoming, Michigan, Nueva York hasta Costa Rica (Evans, 1966), Cuba (nuevo registro).

Alayo (1976) identificó a esta especie, con dudas, como *A. completus.* Sánchez y Genaro (1989) bajo esta clasificación publicaron algunas notas sobre la conducts de nidificación. Las observaciones de Genaro (1993) para *Aporinellus* sp., tambien corresponded a *A. medianus.* Esta especie se observa con frecuencia en las costas.

Material Examinado. — Hembras: Guanahacabibes, Pinar del Rio, xi.81. col. J.A. Genaro; Playa Caimito, La Habana, ix.91 *(n* = 2), xii.91, col. J.A. Genaro; Ciénaga de Zapata, Matanzas, v. 62, cols. P. Alayo, L. Zayas & L García *(n* = 2); Jibacoa, La Habana, xi.63, cols. L. Zayas, P. Alayo & I. García; Brisas del Mar, Ciudad de La Habana, i.87, col. J.A. Genaro. Machos: Puerto Escondido, La Habana, vi.70, col. R. Alayo; Cienaga de Zapata, Matanzas, v.62, cols. P. Alayo, L. Zayas & L Garcia.

Agradecimientos. — El Rare Center for Tropical Conservation, Philadelphia, financió mi visita a diferentes museos de Estados Unidos, permitiendo el acceso a las colecciones y la literature. Howard E. Evans (Colorado State University) amablemente identificó a *A. medianus.*

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Sobre la ausencia del género *Crossopriza* (Araneae: Pholcidae) en Cuba, con una nueva sinonimia para *Artema atlanta* Walkenaer, 1837

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En su lista de las arañas de Cuba, Alayón (1994) informs nueve géneros pertenecientes a la familia Pholcidae: *Modisimus* Simon, *Bryantia* Mello-Leitão, *Anopsicus* Chamberlain and Ivie, *Physocyclus* Simon, *Smeringopus* Simon, *Artema* Walckenaer, *Spermophora* Hentz, *Micromerys* Bradley y *Crossopriza* Simon. Por encontrarse en homonimia, el género *Bryantia* fue reemplazado por el género *Bryantina* (Brignoli 1985). La especie *Micromerys dalei* Petrunkevitch, 1929, supuestamente el único representante de ese género en nuestro país, realmente pertenece al género *Leptopholcus* Simon (Deeleman-Reinhold 1986). Recientemente, Pérez (en prensa) informs un décimo género al citar a *Microphol cus fauroti* (Simon, 1887) para Cuba.

El género *Crossopriza* cuenta con cuatro especies americanas: *C. saltensis* Mello-Leitão, 1941, y *C. mucronata* Mello-Leitão, 1942, ambas de Argentina, *C. brasiliensis* Mello-Leitão, 1935, de Brasil y *C. sexsignata*

Franganillo, 1926, descrita de Luyanó, Ciudad de la Habana, Cuba (Roewer 1942-1954, Brignoli 1983).

Al estudiar la colección Pelegrin Franganillo, depositada en el Instituto de Ecología y Sistemática del Ministerio de Ciencia, Tecnología y Medio Ambiente (La Habana), tuve la oportunidad de examinar los sintipos de *C. sexsignata* (una hembra, un macho adulto y dos juveniles), los cuales están contenidos en dos frascos marcados con el número 201. Estos ejemplares corresponded a la especie *Artema atlanta* Walkenaer, 1837, citada por primers vez para Cuba por Bryant (1940), la cual es de amplia distribución mundial (pantropical) y probablemente constituya un elemento introducido en América (Brignoli, 1981). La forma del palpo masculino se correspond muy bien con los dibujos de *A. atlanta* dados por Petrunkevitch (1929) y Brignoli (1981).

La descripción de *C. sexsignata es* inadecuada y no expone caracteres que entren en contradicción con *A. atlanta*, incluso las seis manchas muy claras sobre el cefalotorax (tres a cada lado) a las que hate alusión el nombre específico, son típicas de *A. atlanta. No* cabe duda de que *C. sexsignata es* un nuevo sinónimo de *A. atlanta.*

Franganillo (1926, 1936) citó a *Crossopriza pristina* (Simon, 1890), para tres ciudades cubanas: La Habana, Cienfuegos y Santiago de Cuba. Dicha especie, que es el tipo del género, fue descrita de Arabia. En la colección P. Franganillo no existen ejemplares de ese taxon y es muy probable que el referido registro sea también producto de un error de identificación. Según parece, el género *Crossopriza* no se encuentra en Cuba ni en las Antillas, lo que explicaría por que Petrunkevitch (1929) y Bryant (1940 y 1948) no lo mencionan en sus estudios sobre las arañas de Puerto Rico, Cuba y La Española, respectivamente.

Agradecimientos. — Quiero expresar mi más profundo agradecimiento a la Prof. María Elena Galiano, al Lic. Martín Ramírez y a la Dra. Cristina Scioscia por la maravillosa atención que me dispensaron durante mi estadía en el Museo Argentino de Ciencias Naturales "Bernardino Rivadavia", que me permitió adquirir los conocimientos y la bibliografía necesarios para comenzar mis estudios sobre los fólcidos cubanos.

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Aspectos de la conducts de un individuo de *Alsophis portoricensis y* pichones y adultos de Reinita *(Coereba flaveola)* durante un episodio de depredación

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La Reinita *(Coereba flaveola)* ha sido bastante bien estudiada (Cory, 1886; Biaggi, 1955; Gross, 1958). No obstante, tan solo hay un informe de reptiles como posibles depredadores de esta ave. Aunque Wunderle (1982) no observó directamente a *Boa enhydris* depredar sobre huevos y pichones de la Reinita en Granada, encontró boas en nidos del ave en donde habían desaparecido los huevos o pichones.

Hay otros informes sobre la depredación de pájaros por parte de culebras (ej. Ottenwalder, 1980; Tolson y Henderson, 1993), pero la técnica utilizada por estas para depredar en nidos cerrados, como el de la Reinita, no ha sido descrita.

Aunque el macho de la Reinita defiende el territorio de anidamiento (Biaggi, 1955; Gross, 1958; Wunderle, 1984; Wunderle et al. 1992) la conducts de tumultos o turbas (mobbing) no ha sido informado en la especie.

El objetivo de este trabajo es describir la conducts de un individuo de la culebra *Alsophis portoricensis portoricensis y* de los pichones y adultos de Reinita de Puerto Rico *(C. f. portoricensis)* durante un episodio de depredación.

Conducta de la Culebra

El jueves 10 de marzo de 1994, a eso de las 0800 horas un individuo de *Alsophis* fue observado trepar a un árbol de limón en el Barrio Cedro de Cayey. Una vez en el árbol, auscultando el aire con su lengua, la culebra se movió directamente hasta una rama (a 2.5 m. de altura) que tenía, en el extremo distal, un nido de Reinita. La *Alsophis se* movió a lo largo de la rama y una vez tuvo la cabeza sobre el nido comenzó a hurgar en este buscando un hueco o hendidura por

donde entrar. Al no lograr su objetivo, movió la parte posterior del cuerpo hacia el frente, enrollando la cola parcialmente sobre la rama. Una vez bien sostenida se movió sobre la estructura, doblándose, hasta encontrar la entrada del nido en la parte inferior. Al meter la culebra la cabeza dentro del nido, de este salió súbitamente, un pichón (cuya edad a base de su desarrollo se calculó entre 9-10 alias), estrellándose en el suelo ya que su plumaje no estaba bien desarrollado. Un segundo pichón fue atrapado por la culebra.

El reptil sacó al ave del nido, y la movió hasta la rama de la que se sostenía. Una vez el pichón estuvo inmóvil, la culebra empezó a ingerirlo comenzando por la cabeza. La *Alsophis* tardó unos 12 minutes en ingerir su voluminosa Press. Luego de tragarse el Pichón regresó al nido y sin titubeos se dirigió directamente a la entrada. En pocos segundos la culebra regresó a la rama, pero esta vez con su boca vacía. Luego giró y se deslizó por la misma rama hacia el tronco principal y se atrapó para identificarla.

Conducta de los pichones y adultos de Reinita

Los nidos de Reinita son fáciles de localizar debido al ruido que producen los pichones, particularmente cuando los adultos meten la cabeza en este para alimentarlos. No obstante, en esta ocasión, mientras la culebra se encontraba en la rama y luego sobre el nido, los pichones y adultos de Reinita en las cercanías se mantuvieron en silencio. Una vez salió el primer pichón del nido y cayó al suelo, una de las reinitas comenzó la eventual conducts de turbas (mobbing) e inmediatamente se unió a esta un segundo adulto. Durante uno de los vuelos de embestida las aves casi tocaron al reptil y este dobló su cuerpo. Sin embargo, durante el resto del tiempo la culebra permaneció inalterada, sobre la rama, comiendose el pichón. La conducts de turbas se mantuvo durante todo el tiempo que la culebra estuvo ingiriendo el pichón y cesó cuando esta dejó el área del nido

El pichón que cayó al suelo se escondió entre la vegetación y se mantuvo inmóvil, sin producir sonidos, durante toda la conducts de turbas.

Rodríguez-Robles y Leal (1993a, b) indican que *Alsophis portoricensis es* un generalista en su dieta y en conducts alimentaria. Las observaciones producto de este trabajo apoyan dicha hipótesis.

Crook (1963) y Collias y Collias (1963, 1984) han sugerido que la entrada en la parte inferior de nidos cerrados, como el de la Reinita, puede ser una protección contra la depredación por parte de culebras. La evidencia indirecta obtenida por Wunderle (1982) y la de este caso no apoyan dicha hipótesis. Sin embargo, el tipo de nido construido por la Reinita podría servir de protección contra otros depredadores potenciales como el lagarto de Puerto Rico *(Anolis cuvieri),* el cual ha sido informado depredando pichones de otras aves (Pérez-Rivera, 1985).

Reconocimientos. — Se le agradece a Manuel J. Vélez Miranda sugerencias que ayudaron a mejorar el trabajo.

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Palms throughout the World. David L. Jones. 1995. Smithsonian Institution Press. Washington, D.C. 410 pp. [First published in Australia by Reed Books, Chatswood, N. S. W.] ISBN 1-56098-616-6. Library of Congress Catalog Number 95-68615.

Jones' *Palms of tbe world* is a lavishly illustrated book filled with information about palms. There are 326 colored photos, many taken by the author, nine black and white photographs and 29 plates of line drawings by the author, all illustrating palms. The book is a considerably extanded outgrowth of his popular *Palms in Australia*, which was published in 1984, and which, despite being limited to palms cultivated in Australia, was a valuable reference for anyone interested in palm horticulture. From his discussions and photographs of the various genera and species, it is clear that Jones has observed many of the treated taxa in the wild as well as in cultivation and has a good working knowledge of their horticultural requirements and potentials,

As with his other works, Jones' *Palms of the world is* clearly aimed for the horticulturist and the amateur botanist. The bibliography cites 191 references, ranging from Beccari's 1909 papers on Philippine palms to papers published in 1992, with the majority of the references being to scientific papers rather than to secondary sources. But there is a general absence of citations in the text, which while increasing readability, often makes it difficult to determine the source of Jones' statements. How much of what is presented is based on personal observation and how much is taken from the literature is not evident,

In addition to a general, brief discussion on palms, the first part of the book has chapters on their morphology, economic importance, biology, cultivation, diseases, and propagation, with a final chapter on their growth as container plants. The chapters are broken up into sections and subsections which are clearly labelled in bold face, The result is a workman-like, no frills presentation of facts about palms. While extensive in its coverage, the first part, especially the portions on morphology and biology, has some problems. There is needless redundancy—the same information reappears in different sections, at times on the same page. For example, on page 10 we are told in the opening sentence that palms are members of the family Arecaceae or Palmae (an older alternative name for the family). The same information is given in the final sentence at the bottom of the page. Or on page 15 where the information in the World Distribution section is largely repeated in the next paragraph under the heading of Latitudinal Range. The flowering behavior of palms, which first is given on page 14 under the heading of Generalized Growth Features is repeated again beginning On page 35 under the heading Of The Inflorescence. More attention to organization and editing would eliminate such needless repetitions.

The introductory chapter and the chapters on structure and biology have some oversimplications that result in confusion or worse, misinformation. For example, his statement that the pattern of island endemism found in palms shows their ability "to evolve and make use of specific niches in the environment" is both biogeographical and ecological nonsense. The discussions on palms in extreme habitats (page 16), on calcareous soils (page 17), and on soils high in heavy metals (page 18) are not wrong (well, the implications in the heavy metal explanation may be), but are so vague as to be meaningless or misleading. The recovery of palm pollen from the Eocene London Clay deposits is explained by the statement that "[c]hanges have occurred." What the changes are is never given. Or the statement that "palms flower when mature," which is made several times, is treated as a scientific fact, rather than as the definition it is. The discussion of growth forms and flowering patterns would have been more clear and logical had the author explained growth in terms of nodes, internodes and axillary buds—apical branching in some dichomotously branched taxa and *Chrysolidocarpus* not withstanding. The term 'ligninicolous' is more appropriate for palms than the term 'woody,' which is used throughout and implys that secondary growth has occurred. The confusion becomes critical on page 23 when secondary thickening in dicotylendons is attributed to the bark only. No mention is ever made of the primary thickening meristem in palms. Node-internode, secondary growth, and primary thickening meristems are concepts that if presented clearly and well-illustrated can be understood by the lay reader. Overall, these are small complaints, and while detracting from the text, do not seriously reduce the overall information content. However, the visual quality of the morphology chapter is compromised by the author's line drawings, While apparently accurate, they look amaturish,

I was pleased that a discussion on plant nomenclature was included under the section Name changes. This is a section that more horticulture books should include. From the horticulturists' perspective botanists periodically change the scientific names of plants for no apparent reason beyond that of sowning confusion, Jones' discussion helps somewhat by explaining the rule of piority. My only complaint is that the section should have been expanded to include changes not just due to piority, but also to differences in generic concepts. Again, the lay reader can understand these concepts if presented clearly, with examples. Finally, it is heartening to see a section, however brief, on conservation. The general public is becoming aware, perhaps too slowly and too late, that a mass extinction of the earths biota is now underway, and that humans, due to their sheer numbers and technology, are responsible for this extinction. Jones' discussion covers this aspect of the problem and in passing notes the possible harm done by plant collectors (in his chapter

on economic botany he reports that palm seed collecting on Lord Howe Island for horticultural purposes was a major industry, accounting for A$100,000 worth of exports in 1975). But Jones stops well short of how palm enthusiasts can help reduce extinction rates. Collecting from wild populations, especially those in danger of extinction needs to be carefully controlled. Enthusiasts need to work with local botanical gardens and palm societies to establish breeding programs; genealogical records need to be maintained in order to control inbreeding and to maintain local genotypes. While genetic diversity of many palm species in the wild is being lost, some genetic diversity can be maintained in cultivated stock if the proper programs are instigated. The primary goal of horticultural groups should no longer be the production of new select cultivars for our gardens, but the saving of genetic diversity, and where practical, re-introduction of populations and species in nature.

The section on economic uses of palms is a broad coverage of everything possible you can do with palms. Despite having worked in the tropics for years, I was only vaguely aware of the importance of palms in the economy of tropical and subtropical areas. After reading Jones treatment, it is easy to see why palms are considered only second after the grasses in economic importance. The chapters on horticulture are well written and far stronger in information than those on structure and biology. Perhaps the most useful concepts from these chapters is the ease with which palms can be incorporated into most gardens and their potential as container plants. As a group, palms are relatively disease free, easy to grow, and predictable in size and form. These features, combined with a graceful and/or dramatic growth habit, make palms ideal for landscaping indoors and out. Perhaps Jones enthusiasm will help revive the potted palm fad of Victorian times.

The second part of the book is an alphabetical arrangement of plains that are currently in gardens or horticultural collections, or which Jones considers as having horticultural potential. His discussion includes 123 genera and 758 species (plus a number of subspecific taxa) of the 200 genera and estimated 2128 species that Uhl and Dransfield recognize in their *Genera palmarum* (1987). Jones treatment can certainly be considered as extensive as well as illustrating the great horticulural importance of the Arecaceae. However, there is a clear Old World bias to the selection. *Hortus III,* which was published in 1976, is an enumeration of plants cultivated in North America north of Mexico, and in Hawaii and Puerto Rico. Jones' treatment includes 27 genera not found in *Hortus III,* of which two are from the New World, the rest being Old World. Correcting for synonymy, *Hortus III* includes 15 genera not treated by Jones. Of these 15 genera, 14 are from the New World; only *Vonitra* from Madagascar is Old World. Several of the genera Jones does not include, such as *Ceroxylon, Copothrinax, Geonoma,* and *Maximiliana* are considered by Uhl and Dansfield as having excellent horticultural potential. Others, such as *Asterogyne, Mauritia, Phytelephas, Scheelea,* and *Vonitra* are used extensively in local economies. I have seen *Acrocomia* species used as landscape trees in Puerto Rico and Mexico.

The scientific, and when there is one, the common name, are given for each genus and species discussed. The origin of the scientific name is given, which I always enjoy as it helps reduce the resistance to learning and using scientific names (excepting perhaps in the case of the palm, *Johannestiismannia). The* country of origin and habitat are given as well as a brief, informal description. The descriptions of the various taxa are not adequate for identification purposes in most cases. They would help to determine if a mature plant being grown under a certain name is indeed that taxon, but to determine an unknown palm would be most difficult. For the most part Jones uses familiar English terms in his descriptions, and where more technical terminology is used the reader can refer to the illustrations in the chapter on structure or to the glossary at the end of the book.

Jones follows the most recent classifications (up to 1992) for each group and does a good job in not getting tangled up with the problems of synonymy due to changes in generic concepts. He includes three pages at the end of the book for "Frequently used Synonyms," which I found most helpful when comparing different treatments. If his discussion for *Calyptonoma rivalis* is any example, he has done a good job researching the treated taxa. For a long time this endemic species was known from only a single location in Puerto Rico; only relatively recently two other populations were found. To my knowledge, a report of these new sites was never published, yet Jones reports it from three locations. I'm impressed. I will differ with him about the growth habit in *Sabal casusiarum.* He describes it as having "a dense heavy crown of fan leaves which always seems to be too small for the massive trunk." The picture on page 346 does bear out this statement, but the plants in nature and cultivation in northwestern Puerto Rico are quite well proportioned.

The illustrations are a strong feature of the book. The colors and reproductions are excellent. The 326 color photographs cover 90 genera and 250 species, all of them are well selected and demonstrate salient features of the species. The author is to be commended on his ability as a photographer and in his selection of pictures. Nine plates from the *Botanical Magazine,* which of course are marvelous, are included, and enhance the overall high photographic standard of the book.

Would I recommend this book? and if so to what readership? Yes, I would recommend it—despite a few short comings, it is a valuable book, especially for persons interested in growing palms. It is in the second portion of the book, in his descriptions of taxa that Jones' enthusiasm for the subject comes through. Let's be realistic about it. Most palms, once you get past the big, little, palmate, pinnate categories, look alike. Yet, after reading each description, I felt that I must have this species in my palm collection and I don't even have a palm collection. To use his own words, Jones is a palm enthusiast.

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