

Szymon Tenenbaum, a forgotten contributor to the herpetology of the Balearic Islands

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Fecha de aceptación: 7 de febrero de 2010.

Key words: Szymon Tenenbaum, history, Balearic Islands, Majorca.

RESUMEN: Szymon Tenenbaum (1892-1941) fue un entomólogo polaco que publicó sobre la herpetofauna de las Islas Baleares. Este trabajo lo hizo basándose en una visita de cuatro meses que hizo a estas islas en el año de 1913. Su mayor contribución a la herpetología es un trabajo sobre reptiles y anfibios de las islas Baleares, originalmente publicado en polaco en 1915 y que incluye un amplio resumen en alemán. Además de este trabajo, Tenenbaum hizo referencia a los anfibios y reptiles en su monografía sobre de la fauna de escarabajos de la Islas Baleares publicada ese mismo año. Terminó su trabajo con la ayuda del herpetólogo sueco Otto Cyrén, y en este se reconocen 16 especies y 27 variedades de anfibios y reptiles. Además de este listado taxonómico, se documentan notas sobre historia natural, datos morfológicos de algunos taxa y sugiere que los registros de *Rana esculenta* de las Islas Baleares corresponden en realidad a *R. ridibunda* (en la actualidad *Pelophylax perezi*). Las contribuciones de Tenenbaum a la herpetología de las Baleares fueron menores y aparentemente han sido poco citadas, pero su actividad es importante ya que llena un hiato temporal entre los trabajos del siglo XIX de Boscá, Braun y Bedriaga y las contribuciones posteriores de los herpetólogos españoles y alemanes del siglo XX. A la luz de las revisiones recientes sobre la historia de la investigación herpetógica en las Baleares, presentamos la historia de Szymon Tenenbaum como un 'capítulo olvidado'.

Figure 1. Tenenbaum later in life, perhaps around 1939. Photo courtesy of the Archives of the Museum and Institute of Zoology of the Polish Academy of Sciences.

Figura 1. Fotografía de Tenenbaum alrededor de 1939. Fotografía cortesía de de los Archivos del Museo e Instituto de Zoología de la Academia de Ciencias de Polonia.



The history of herpetological research in the Balearic Islands is long and rich and has included contributions from some of the greatest European herpetologists of the last two centuries (Pérez-Mellado *et al.*, 2008). Not surprisingly, much of this work has been carried out by Spanish herpetologists, but scientists of other nationalities, for example Germans, have also made substantial advances in the study of the Balearic herpetofauna (Böhme, 2004). We here wish to shed light on the contributions of a Polish biologist, Szymon Tenenbaum (1892–1941), to Balearic herpetology. To the best of our knowledge Tenenbaum's herpetological work in the region has escaped the notice of all subsequent workers. It was not noted in the historical overview of Pérez-Mellado *et al.* (2008), nor is it cited in larger works on the herpetofauna of the Balearics (e.g. Eisentraut, 1950; Mayol, 2003) or in other works dealing more broadly with the Spanish herpetofauna that include the Balearics (e.g. García-París, 1985; Salvador, 1985, 1998; Barbadillo, 1987; Barbadillo *et al.*, 1999; Salvador & García-París, 2001; Salvador & Pleguezuelos, 2002; García-París *et al.*, 2004; Aragón-Rebollo *et al.*, 2006). Neither is Tenenbaum cited in the many taxon specific works on Balearic amphibians and reptiles referenced by Salvador (1998), Böhme (2004), García-París *et al.* (2004), and Pérez-Mellado *et al.* (2008). Although the work done by Tenenbaum has long since been eclipsed by that of others, we take this opportunity to rescue it from obscurity and give it its place in the history of herpetological exploration of the Balearic Islands.

Szymon Tenenbaum (Figure 1) was born in Warsaw in 1892, where he attended the prestigious Kreczmar High School. In 1911 he began his studies of natural sciences at the

Jagiellonian University in Krakow, working in the laboratory of Henryk Hoyer (1864–1947), an eminent specialist in the field of anatomy and embryology. From 1914 Tenenbaum worked as a teacher, and later director, of the Jewish College in Warsaw. In 1932 he received the Ph.D. at the University of Vilnius (currently Lithuania, but prior to 1939 part of Poland) under Jan Prüffer (1890–1958), one of the most active entomologists of the period.

Tenenbaum quickly became one of most important entomologists of pre-war Poland, mainly specializing in beetles (see Prüffer & Wolski, 1964 for Tenenbaum's bibliography). He published about 30 works on the fauna of Poland and described several new species. He was also an expert on exotic insects and organized and participated in various scientific expeditions including ones to Brazil (1923), Mexico (1926 with T. Wolski), and Palestine (1927). He was a collaborator and correspondent of the Commission Physiographique of the Polish Academy of Sciences and Letters [Komisja Fizjograficzna PAU], the Warsaw Scientific Society, and the Polish National Museum of Zoology. Tenenbaum was also a pioneer of research on the urban fauna of Europe. He co-authored *Zoological Guide Through the Surroundings of Warsaw* (Sumiński & Tenenbaum, 1921) a book all the more important today because it describes many habitats that no longer exist. Although the vast majority of Tenenbaum's research focused on beetles and various entomological issues, he also became interested in herpetology and was the author of three publications in this field (Tenenbaum, 1913, 1914, 1915a).

After the invasion of Poland in 1939, Tenenbaum was trapped in the Warsaw Ghetto. Hungry and sick, he refused an opportunity to

escape organized by Jan Żabiński (1897–1974) one of his zoologist friends and an officer of the Polish resistance. Szymon Tenenbaum died on 29 November 1941. According to Prüffer and Wolski (1964) “a serious illness was the direct cause of his death, but he could have been fully healed. It was war and Nazi barbarism that prevented him from receiving the necessary care. Tenenbaum was a direct victim of the war, he did not want to capitulate to the enemy.” This last period of Tenenbaum’s life, as well as the story of the survival of his entomological collections, hidden by Żabiński, has been chronicled in some detail (Żabińska, 1968). After the war the collections, as well as Tenenbaum’s library, likewise hidden by a family friend, were offered to

the Zoological Museum in Warsaw by Mrs. Eleonora Tenenbaum-Krajewska, in accordance with her husband’s will.

In 1913, Tenenbaum spent four months (April to July) in the Balearic Islands where he was based in Palma de Majorca but also visited Ibiza, Cabrera, and several smaller islets. The purpose of the trip was therapeutic; the Mediterranean climate had been recommended by his doctors as beneficial for lung problems. However, rather than resting he used the opportunity to work on the fauna of the islands. In 1915 he published *Beetle Fauna of Balearic Islands* (Tenenbaum, 1915b) with an inventory of 1677 species (352 new for the region). Despite the title of this work, he also mentioned homopterans, molluscs, arachnids, myriapods, amphibians, and reptiles and even briefly reviewed the herpetological research of earlier naturalists, citing the works of Martínez y Sáez (1875), Barceló i Combis (1876), Böttger (1880), Boscá (1877, 1880, 1881, 1883), and Rodríguez Femenias (1887). Tenenbaum also cited his own publication on the Balearic herpetofauna (Tenenbaum 1915a), proving that this work predated his beetle book.

Tenenbaum’s main contribution on herpetology, *Reptiles and amphibians of the Balearic Islands* (Figure 2), was published in 1915 in Warsaw as a small offprint of the Laboratory of Biology of Society of Friends of Nature [Pracownia Biologiczna Towarzystwa Miłośników Przyrody]. Probably because of language (Polish, but with a relatively lengthy German summary), the date (Warsaw during the second year of the First World War), and its scarcity, the publication is practically unknown. We consulted a copy of this publication in the library of the Institute of Zoology in Warsaw. This offprint had a handwritten dedication by

Figure 2. Cover page of Tenenbaum’s main contribution to herpetology, *Reptiles and amphibians of the Balearic Islands*, published in 1915.

Figura 2. Cubierta de la contribución herpetológica más importante de Tenenbaum *Los Reptiles y Anfibios de las Islas Baleares* publicada en 1915.



Szymon Tennenbaum to “Dear Janusz” (probably Janusz Domaniewski [1891–1954], a Polish ornithologist).

Tennenbaum (1915a) acknowledged that he was assisted in the determination of his Balearic herpetological collections by Carl August Otto Cyrén (1878–1946), a Swedish chemical engineer and amateur herpetologist affiliated with both the Riksmuseum in Stockholm and the Natural History Museum in Göteborg. Cyrén later published extensively on Mediterranean lacertids, but by 1915 he had published only several papers of local interest in Swedish in the journal *Fauna och Flora* and three papers in German (Cyrén 1909, 1911; Lantz & Cyrén 1913), with which Tennenbaum may have been familiar. During the period 1906–1914 Cyrén worked at the Warsaw branch of Kalle Anilinfarbenfabrik (Notini 1991; Adler 2007), where he probably came into contact with Tennenbaum through local natural history connections.

In the introduction to his paper Tennenbaum (1915a) wrote: “Before moving to the description of forms I want to emphasize an interesting and clearly evident fact. The quantitative composition of the herpetofauna is inversely proportional to the surface of the island. Majorca, the largest of the Balearic Islands, has a rich herpetofauna from the specific point of view, richer than other islands. But from the quantitative point of view, it is relatively poor. The lizards, common on small islands, are rarities on Majorca. Throughout my stay on this island, despite my research, I have failed to find a single representative of *Lacerta*. While on small islands, sometimes distant from Majorca by just a few dozen metres, there were many. The amphibians and snakes, usually living in damp places, live only on the larger islands

with freshwater basins. It is interesting to note that the lizards live on islands not only lacking fresh water basins but with almost no vegetation. On some islands where I could not find a single insect, I quite often encountered lizards. The fauna of reptiles and amphibians of Balearic Islands consists of 27 forms representing 16 species.”

In the text only species marked by an asterisk were actually found by Tennenbaum, whereas data for all other taxa originated from literature sources, chiefly those of Braun (1877), Lataste (1879), Bedriaga (1879, 1880), Boscá (1880, 1883), and Rodríguez (1887). The Polish text occupies pages 3–12 of the publication, with a German summary on pages 13–16. This summary, however, only deals with a few of the more interesting taxa: *Lacerta Lilfordi* (varieties f and h), *Tropidonotus viperinus* var. *chersoides*, *Macroprotodon cucullatus*, and *Rana ridibunda*. Below we provide partial translations of Tennenbaum’s accounts of the species he himself observed or collected. Anatomical descriptions and additional information based on previous authors have been omitted. Current names of species follow Carretero *et al.* (2009) and are indicated in square brackets []; our additional comments follow Tennenbaum’s, also in square brackets.

Bufo viridis var. *balearica* Boettg. [*Bufo balearicus*]: This species is known from all islands. I found a specimen under rocks in the dry stream in San Sardina on Majorca.

Rana ridibunda Pall. [*Pelophylax perezii* (López-Seoane)]: Before now this species has not been mentioned in the Balearic Islands. I have collected a significant number in ditches along the road around the city Ibiza on the island of the same name and in ditches along the road between La Puebla and Albufera on Majorca. The specimens that I found correspond to *R. ridibunda*, and

not *Rana esculenta*. In this case *R. esculenta* would not be part of the fauna of the Balearic Islands. [Tenenbaum was correct that earlier records of *R. esculenta* from the Balearics were incorrect, but his identification a *R. ridibunda* was also wrong. *P. perezii* is an introduced species in the Balearics (García-París, 1997).]

Lacerta Lilfordi var. h. (Zootoca Lilfordi Günt.) [*Podarcis lilfordi*]: I found this beautiful variety in a lot on Cabrera in the vicinity of the port but it is also in many other parts of the island. Two ♂♂ from La Guardia.

Lacerta Lilfordi var. f. (*Lacerta muralis* var. *pityusensis* Bosca.) [*Podarcis pityusensis*]: It is very common everywhere on Ibiza. It occurs mostly on stone fences delimiting the fields. There are many in the same city on the ancient walls surrounding the castle and the cathedral.

Tarentola mauritanica L.: Very common on Majorca, Minorca, Ibiza and Cabrera. I collected the largest quantity below stones at Porto Pi near Palma. I have encountered it very often in apartments. On Cabrera I have collected a few almost black specimens. The largest specimen measured 115 mm with a regenerated tail.

Hemidactylus turcicus L.: Lives in the same conditions as the previous species [*Tarentola mauritanica*] but it is much rarer. Throughout my stay I saw a few specimens, all around Palma in Majorca (Porto Pi). It is also found on Ibiza and Minorca.

Macroprotodon cucullatus Geoffr.: [*Macroprotodon mauritanicus*] I found two specimens below stones at Sollar in Majorca in a wetland on the edge of a creek ... the smallest specimen measuring 315 mm and the larger 475 mm.

Tropidonotus viperinus Latr. var. *chersoides* Wagl. (var. d Schreiber) [*Natrix maura*]: Encountered in Majorca and Menorca. It occurs near major expanses of water. Thus it is rarely encountered in the interior of the islands. It lives in great numbers in Majorca in Albufera near Alkudja, near the edge of a large salt marsh. On sunny days, they warm in the sun at the water's edge and in the space of a few hours we could collect more than a dozen specimens effortlessly. I brought back only three specimens from Albufera and Porto Pi.

Thalassochelys caretta L. [*Caretta caretta*]: It is found on all islands. I saw a specimen on Ibiza.

Chelone mydas L. [*Chelonia mydas*]: I found the shell of this species in the Bay of Cabrera. It is also observed in Ibiza.

In addition to these taxa Tenenbaum (1915a) listed the following taxa as components of the Balearic fauna: *Alytes obstetricans Boscai* [*Alytes muletensis*], *Hyla arborea* var. *meridionales* [*Hyla meridionalis*], *Lacerta Lilfordi* typica, *Lacerta Lilfordi* var. a, *Lacerta Lilfordi* var. b, *Lacerta Lilfordi* var. c, *Lacerta Lilfordi* var. d, *Lacerta Lilfordi* var. e, *Lacerta Lilfordi* var. g [*Podarcis lilfordi*], *Coluber scalaris* [*Rhinechis scalaris*], *Coluber leopardinus* var. c [*Zamenis situla*, sic], *Dermochelys coriacea* [*Dermochelys coriacea*], *Testudo graeca*, and *Emys orbicularis*.

Unfortunately, Tenenbaum's writings on the Balearic herpetofauna added little to the data that had already been collected and summarized by late 19th century researchers. His period of activity in the Balearics came at the end of a quarter century of relative inactivity in herpetological investigation in the region, but his collections and observations were made over a short period of time and were combined to just a few, well-known and often-visited islands. Although Tenenbaum made no lasting impact on the herpetology of the Balearics, the "rediscovery" of this Polish researcher reveals that the historical scope of international interest in the region was even greater than has been appreciated (Pérez-Mellado *et al.* 2008).

ACKNOWLEDGEMENTS: We thank the Archiwum MiZ PAN (Archives of Museum and Institute of Zoology of Polish Academy of Sciences) and Miss M. Glowka for the photo of Tenenbaum and R. Wahlgren for providing a herpetological bibliography of Otto Cyrén.

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La mañana del 15 de mayo de 2010, un incendio destruyó una parte de las instalaciones del Instituto Butantan, en São Paulo, Brasil. Se quemaron el edificio de la colección de serpientes y el laboratorio de Artrópodos. Junto con estas instalaciones ardieron la mayoría de los 80 000 especímenes de serpientes y cerca de 500 000 especímenes de arácnidos de las colecciones de esta prestigiosa institución de investigación científica, con más de 100 años de historia. Series típicas de diversas especies nuevas desaparecieron completamente o fueron gravemente afectadas por las llamas.

Estas colecciones zoológicas eran una referencia a nivel internacional. Contenían tanto material procedente de regiones muy aisladas de Brasil, cubiertas por bosques prístinos, como especímenes de regiones donde actualmente ya no existen los ambientes naturales que les cobijaban. No es exageración alguna afirmar que, en la mañana del 15 de mayo, parte de la historia científica de Brasil y del mundo se perdió con estas colecciones.

La Asociación Herpetológica Española quiere expresar su solidaridad a investigadores, conservadores de colecciones y a todo el personal del Instituto Butantan. Este trágico suceso nos hace recordar el también el trágico incendio que destruyó el Museo Bocage de Lisboa en marzo de 1978. Es por ello que ante hechos cómo estos, deseamos con estas líneas reiterar a toda la socie-



Figura 1. Uno de los edificios del instituto Butantan no afectados por el incendio. Autor: Luana Ribeiro de Sousa Brito, Bolsista FUNDAP.

dad brasileña e internacional, nuestro apoyo a las colecciones científicas de referencia como estas. Las colecciones zoológicas eran, son y seguirán siendo de gran importancia para el estudio de la diversidad biológica. Por ello, las instituciones que las albergan deben disponer de recursos económicos y logísticos suficientes para desempeñar su labor. Como en otros casos, son las administraciones, eventualmente con el apoyo de mecenas privados, quienes deben poner los medios para que pérdidas irreparables del patrimonio de la humanidad como esta no se vuelvan a repetir.