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The giant butterfly-moths (Lepidoptera: Castniidae) of the “Grigore Antipa” National Museum of Natural History, Bucharest

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Abstract. The 21 specimens belonging to the family Castniidae (Lepidoptera) in the collections of the “Grigore Antipa” National Museum of Natural History were studied and catalogued. Concise data on the distribution and biology for each one of the species treated herein are presented. The presentation of this material gives the occasion for a brief consideration regarding the historical background of the foundation and development of this part of the museum’s collection as well as a short presentation of the entomologist’s career of Francisc (Franz) Salay, the one who brought the specimens of Castniidae presented in this catalogue to the museum collection.

Key words: biodiversity, neotropical fauna, entomological collection, illustrated catalogue, collection history.

Introduction

The family Castniidae was established in 1828 by the French entomologist Jean-Baptiste Alphonse Dechauffour de Boisduval. Currently it groups about 150 peculiar diurnal moths species (Moraes & Duarte 2014) of medium to large size (the wingspan is 20 to 155 mm). A few species fly for a short time, in the dusk – within this family, adults are usually active during daytime, in warm, sunny conditions. Generally, Castniidae are robust body moths, and like the butterflies they have clubbed antennae. Most of the species have the dorsal face of the forewings with various dull and cryptically patterns, sometimes with broad transparent or coloured bands. On the other hand, the hindwings are generally more colourful and some have contrasting colours in the central area or broad concentric bands along the margin. Only few species are dimorphic, with the females occasionally having wider bands on the forewings in addition to the transparent ones, but in most cases both sexes are generally similar in appearance.

The monophyly of the group is well supported also by the molecular data, but the systematic position of this family is still undetermined (Kallies & al. 2016). It is highly probable that this family has established its current range prior to the breakup of the bygone southern continent Gondwana, because today the species within it are distributed almost exclusively across South and Central America and Australia (Miller 1986, Holloway 1998). Only *Tascina* Westwood, 1877, a genus with 4 currently known species and for which the subfamily Tascininae was established, is found in south-east Asia (Edwards & al. 1999). The rest of the species in the Castniidae are currently grouped in the subfamily Castniinae. Up to now, all the Australian species are classified together within the genus *Synemon* Doubleday, 1846, commonly known as the sun-moths due to the habit of the adults to be active during the daytime, in warm to hot weather. Considering that the tribe Gazerini was found paraphyletic, the significantly larger number of neotropical species is includes in a single tribe, Castniini, an arrangement that follows Moraes & Duarte (2014).

Despite the efforts made in the last few decades to increase the amount of published data regarding the specimens of Castniidae preserved in different collections all around the world (González & Stünning 2007, González & al. 2010, González & al. 2013, Domagała & al. 2017a, Domagała & al. 2017b, González & Domagała 2019, Rodríguez-Ramírez & al. 2020, González & Domagała 2021), this family remains a poorly known one, also because the existing specimens from different collections are not at all or insufficiently studied and known. With only few notable exceptions, Castniidae are rarely found in collections and the destruction of the natural habitats throughout the Neotropical realm decrease the possibility of finding and collecting species/specimens of this group. However, the importance of these specimens is gradually increasing, since they are more often used (for example) as the basis for systematic studies regarding the Castniidae (Moraes & Duarte 2014), this being just one of the reasons that justify the intensification of the efforts for studying the specimens from this systematic group that are found in different collections all around the world.

As a primary goal, the current paper aims to join the effort to list the specimens of Castniidae, particularly rarely found in various museum collections, and to make available the faunistic data provided by this material. At the same time, this is a relevant part of the old entomological collection of the “Grigore Antipa” National Museum of Natural History in Bucharest, important not only for the diversity of this collection, but also from a historic perspective.

The Catalogue of the Castniidae in the collections of the “Grigore Antipa” National Museum of Natural History

Following a reorganisation of the oldest Lepidoptera collection curated at the “Grigore Antipa” National Museum of Natural History and built up by Francisc (Franz) Salay (1861-1946), the specimens belonging to the family Castniidae were identified, revised, and recorded in a collection database. All the specimens were photographed, and images of the labels found on the pin of each one of them were also taken. The names of the species and the systematic arrangement follow

Moraes & Duarte (2014), with the changes and additions proposed by Worthy & al. (2022). However, since the systematics of this family still suffers revisions, within genera, the species are listed alphabetically. Concise data on the distribution and biology for each of the species treated herein are presented, as well as brief considerations regarding the history of this collection based on the information provided on the original labels of the specimens.

Castniidae Blanchard, 1840

Castniinae Blanchard, 1840

Castniini Blanchard, 1840

Athis clitarcha (Westwood, 1877)

Colombia: Cartago, Valle del Cauca (600 m altitude), 1 ♂ (Fig. 1, 2); the specimen holds a printed label with the mention "Cartago, Cauca, Colombien (alt.) 600 m" and a determination label handwritten by Aristide Caradja (1861-1955) with the mention "*Castnia clitarcha* Ww."

Remarks: Native in Central America, this species is distributed from Guatemala, Honduras and Nicaragua to Costa Rica and Panama (Rothschild 1919, Miller 1986, González & Hernández-Baz 2012, Maes & González 2022). Ruling out a (still possible) labelling error, the data found on the label of this specimen suggest that this species was (and might still be) also distributed further south, in the northernmost part of South America. In this respect, new distribution data are needed to confirm that this species is found also in Colombia.

Castnia invaria penelope Schaufuss, 1870

Paraguay: 1 ♂ (Fig. 3, 4); the specimen holds a printed label with the only mention "Paraguay" and a determination label handwritten by Aristide Caradja with the mention "*Castnia endelechia*" (sic!).

Remarks: A species native to South America; subspecies *penelope* Schaufuss, 1870 can be found from Venezuela and the Guianas to Paraguay, northern Chile, and northern Argentina, notably in the Amazon and Orinoco basins.

The larvae feed inside different Bromeliaceae species. Besides the wild species, it is found also on *Ananas sp.* (including *Ananas comosus*), where they dig large tunnels in the centre of the pineapple plants; occasionally, they also feed on flowers or young fruits. As a result of the above mentioned, it is considered a pest of pineapples.

Castnia invaria volitans Lamas, 1995

French Guiana: 1 ♀ (Fig. 5, 6); the specimen holds a printed label with the mention "Franz.(ösisch) Guyana" and a determination label handwritten by Aristide Caradja with the mention "*Castnia icarus*".

Remarks: The subspecies *volitans* Lamas, 1995 is only found in the South America north to the Amazon basin, from the Guianas to Venezuela and eastern Colombia. Like the other subspecies, its larvae feed on different Bromeliaceae species, being also a pest of pineapples (*Ananas comosus*).

Castnia papilionaris papilionaris Walker, [1865]

Colombia: Villavicencio, 1 ♂ (Fig. 7, 8); the specimen holds a printed label with the mention "Villavicencia (sic!), Columbia" and a determination label handwritten by Aristide Caradja.

Remarks: A species distributed from Panama, Colombia, Venezuela and Ecuador to Peru and north-western Bolivia (Zongo – Rothschild 1919); the nominate subspecies is considered to be confined to Colombia (Worthy & al. 2022). Little if nothing is known regarding the biology of this species.

Ceretes marcelserres (Godart, [1824])

Brazil: Rio de Janeiro, 1 ♂ (Fig. 9, 10) and 1 ♀ (Fig. 11, 12); each specimen is holding a printed label with the mention "Rio Janeiro" and a determination label handwritten by Aristide Caradja with the mention "*marcelserres* Godt.".

Remarks: A species much less common in collections, its distribution area being confined to Bolivia, Paraguay, and south-eastern Brazil. Males have androconia on the dorsal side of the hindwing. The larvae are developing on *Miltonia flavescens* (Ríos & González 2011).

Eupalamides cyparissias (Fabricius, 1776)

1 ♂ (Fig. 13, 14); this specimen holds only the determination label handwritten by Aristide Caradja with the mention "*Castnia daedalus* (sic!) Cr."

Remarks: A species distributed from Panama to Peru, Bolivia, and Brazil, recorded also in Trinidad. The larvae have been reported on several palm species (*Elaeis guineensis*, *Cocos nucifera*, *Mauritia carana*, *Mauritiella peruviana*, *Astrocaryum murumuru* and *A. javarense*) and are a well-known pest for oil palms, coconut trees and murumuru palms. The life history of this species has been extensively studied (Korytkowski & Ruiz 1979a, Korytkowski & Ruiz 1979b, Ruiz & Korytkowski 1980).

Imara pallasia (Eschscholtz, 1821)

Brazil: Rio de Janeiro, 1 ♀ (Fig. 15, 16); the specimen holds a printed label with the mention "Janeiro, Brasil" and a determination label handwritten by Aristide Caradja with the mention "*Castnia pallasia* Esch."

Remarks: A species with limited distribution, found in the Serra do Mar primary coastal cloud forests from south-eastern Brazil (Miller 1986, González & Stüning 2007, González & al. 2010, González & Domagała 2019, González & Domagała 2021). Although the adults have been spotted hill topping with several *Morpho* sp. and other Nymphalidae, nothing else is known about the biology and ecology of this species (Miller 1986).

Imara satrapes satrapes (Kollar, 1839)

Brazil: Rio Grande do Sul, 1 ♀ (Fig. 17, 18); the specimen holds a printed label with the mention "R.(io) Gr.(ande) d.(o) Sul, Brasil" and a determination label handwritten by Aristide Caradja with the mention "*Castnia satrapes*".

Remarks: A species distributed in southern Brazil, Paraguay, and Uruguay. Adults have been spotted flying high (over 10 m above ground), normally at mid-day (11:00–15:00) (Bieżanko 1961, Miller 1986). The larvae have been reported feeding on different wild Bromeliaceae (Miller 1986, Ríos & González 2011).

Prometheus cochrus (Fabricius, 1787)

1 ♂ (Fig. 19, 20); the specimen holds a printed label with the mention "Palmar, Guatemala" (an obvious mislabelling error; other mislabelled specimens of Castniidae in museum collections were reported also by González & al. 2010 and González & al. 2013) and a determination label handwritten by Aristide Caradja with the mention "*Castnia garbei* Foett."

Remarks: A highly variable species, distributed in south-eastern Brazil and Paraguay (Jørgensen 1930, Miller 1986). Adults have been spotted in Brazil flying at mid-day (11:00-15:00) in clear areas close to creeks (Biežanko 1961). Larvae are feeding on different Bromeliaceae, including pineapple (Biežanko 1961, Ríos & González, 2011).

Prometheus heliconioides dodona (Druce, 1896)

Peru: Iquitos, Omaguas (150 m altitude), 1 ♂ and 1 ♀ (Fig. 21, 22); each specimen is holding a printed label with the mention "Iquitos, Omaguas, 150 m" and a determination label handwritten by Aristide Caradja with the mention "*Castnia heliconioides*".

Remarks: Native in South America, this species was so far recorded from in the Guianas, Brazil, Ecuador, Peru, Bolivia, and Paraguay; the subspecies *dodona* (Druce, 1896) is distributed in Peru and Ecuador (Lamas 1995). It is a typical example of a mimetic sun-moth, with adults of this species resembling more or less different models of the mimetic ring which includes *Athesis* sp. (Nymphalidae: Danainae), *Callithomia lenea* (Cramer, [1779]) (Nymphalidae: Danainae), *Dircenna* sp. (Nymphalidae: Danainae), *Epithyches* sp. (Nymphalidae: Danainae), *Euthresis* sp. (Nymphalidae: Danainae), *Lycorea ilione* (Cramer, 1775) (Nymphalidae: Danainae), *Methona* sp. (Nymphalidae: Danainae), *Notophyson* sp. (Erebidae: Arctiinae), *Paititia neglecta* Lamas, 1979 (Nymphalidae: Danainae), *Parides chabrias* (Hewitson, [1852]) (Papilionidae: Papilioninae), *Patia orise* (Boisduval, 1836) (Pieridae: Dismorphiinae), *Thyridia psidii* (Linnaeus, 1758) (Nymphalidae: Danainae), etc (Miller 1986, Ríos & González 2011, González & Domagala 2019).

Prometheus heliconioides obidona (Rothschild, 1919)

French Guiana: Saint-Laurent-du-Maroni, 1 ♂ (Fig. 23, 24); the specimen holds a printed label with the mention "St. Laurent, Guyana" and a determination label handwritten by Aristide Caradja with the mention "*Castnia heliconioides*".

Remarks: The subspecies *obidona* (Rothschild, 1919) is distributed in northern Brazil (Pará), Guyana and French Guiana (Lamas 1995).

Prometheus simulans songata (Strand, 1913)

Bolivia: Provincia La Paz, 1000 m altitude, 1 ♀ (Fig. 25, 26); the specimen holds a printed label with the mention "La Paz Prov., (alt.) 1000 m, Bolivia" and a determination label handwritten by Aristide Caradja with the mention "*Castnia melessus* Druce".

Remarks: Originally described after a female specimen collected in Colombia, this species is largely distributed in South America, from Colombia, Ecuador and Venezuela to Peru, Bolivia, and western Amazonas in Brazil (Miller 1986, González & Fernández Yépez 1993, González 1997, Hernández-Baz & al. 2012); the subspecies *songata* (Strand, 1913) is distributed in the southern part of this vast distribution area, in Bolivia. It is one of the several species of Castniidae that are part of the mimetic rings that include as models poisonous Nymphalidae butterflies (Miller 1986).

Telchin cacica procera (Boisduval, [1875])

Panama: Chiriquí (Province), 1 ♂ (Fig. 27, 28) and 1 ♀ (Fig. 29, 30); each specimen is holding a printed label with the mention "Chiriquí, Panama" and a determination label. The female specimen's determination label is handwritten by Aristide Caradja with the mention "*Castnia cacica*".

Remarks: A species distributed from Mexico (however, according to Worthy & al. 2022, the exact type locality is in doubt and there are no recent, reliable records from Guatemala) south to Costa Rica and Panama. The larvae of this moth are a known pest in plantain and sugar-cane plantations, where they can produce moderate damages.

Telchin diva chiriquiensis (Strand, 1913)

Panama: Chiriquí (Province), 1 ♂ (Fig. 31, 32); the specimen holds a printed label with the mention "Chiriquí, Panama" and a determination label handwritten by Aristide Caradja with the mention "*Castnia diva* Bt."

Remarks: A species distributed from Mexico right to Central America south to Colombia and Ecuador (Lamas 1995, Miller 1995, Salazar 1999, González & al. 2010, Vinciguerra 2010, González & al. 2013). Little if nothing is known regarding the biology of this species.

Telchin evalthe cuyabensis (Lathy, 1922)

Brazil: Rio Farinha, 1 ♀ (Fig. 33, 34); the specimen holds a handwritten label with the mention "*Castnia dardanus*, Farinas" and a determination label handwritten by Aristide Caradja with the mention "*Castnia evalthe* F."

Remarks: By treating this species within the genus *Telchin* Hübner, [1825] we follow Moraes & Duarte (2014). *Telchin evalthe* (Fabricius, 1775) is a species widespread in the Neotropical realm, recorded from southern Mexico to Peru, Bolivia, and southern Brazil (Mato Grosso); the subspecies *euphrosyne* (Perty 1833) was described from "River System, Cuyaba Corumba, Matto Grosso" (Lathy 1922). In this species, the larvae develop on different species of *Bromelia* sp. and *Heliconia* sp. (González & Cock 2004).

Telchin evalthe vicina (Houlbert, 1917)

Ecuador: 1 ♂ (Fig. 35, 36); the specimen holds a printed label with the only mention "Ecuador" and a determination label handwritten by Aristide Caradja with the mention "*Castnia evalthe* F."

Remarks: A subspecies described by Constant Vincent Houlbert (1857-1947) based on 4 specimens collected about 20 years before, in 1893, at "La Chima" by M. de Mathan. According to Houlbert, if compared with the subspecies *viryi* (Boisduval, [1845]), it shows differences in wing pattern. However, a definitive systematic status for this taxon can only be achieved after a revision following both morphological and molecular data.

Telchin licus licus (Drury, 1773)

Brazil: Manaus, 1 ♀ (Fig. 37, 38), coll. Anton Fassl; the specimen holds a handwritten label with the mention "Castnia licus ♀, Coll. Fassl" and a determination label handwritten by Aristide Caradja.

Remarks: A species native to Central and South America, the nominate subspecies being largely distributed from Nicaragua to Peru, Bolivia, and Brazil. The larvae are tunnelling in the stems of *Saccharum officinarum*, *Musa sp.*, *Heliconia sp.* and *Ichnosiphon sp.*, being considered a pest species.

Specimen collected by Anton Heinrich Hermann Fassl (1876-1822) during his last voyage in South America.

Synpalamides fabricii (Swainson, 1823)

Brazil: Rio Grande do Sul, 1 ♂ (Fig. 39, 40); the specimen holds a printed label with the mention "R.(io) Gr.(ande) d.(o) Sul, Brasil" and a determination label handwritten by Aristide Caradja with the mention "*Castnia besckei* Mén.".

Remarks: A species almost endemic to the Atlantic Forest ("Mata Atlântica") found in the southern and southeastern parts of Brazil (Moraes & al. 2010, Penco 2011). Although there are some records of larvae of this species foraging in *Tillandsia aeranthos*, the food plant is still unknown.

**Historical consideration on the first Lepidoptera collection of the
"Grigore Antipa" National Museum of Natural History and its maker,
Francisc (Franz) Salay**

All the Castniidae specimens found in the collections of the "Grigore Antipa" National Museum of Natural History were collected and purchased for the museum more than a century ago. Without exception, these specimens were part of the first, oldest scientific Lepidoptera collection of the museum. Although the exact moment when the Castniidae specimens presented herein entered the museum collection is not known, the one who was in charge with the Lepidoptera collections at the time when these specimens might have entered the museum possession was

Francisc (Franz) Salay (1861-1946; fig. 41). One of the first curators of the museum after it was moved in the current building, a friend and close collaborator of Dr. Grigore Antipa, Salay was responsible for the foundation and development of the museum's first Lepidoptera collection, and all achievements regarding this collection in the first decades of the 20th century are entirely due to his discrete and patient, but at the same time persevering and passionate efforts.

Despite that Francisc Salay worked at the museum for several full decades and distinguished himself during this time by his constant, tireless and persistent efforts dedicated to the building up of a reference entomological collection for a national museum, little is known about him and his scientific and curatorial activity, with only a few exceptions (Iuga 1966, Székely 2014). Moreover, the published materials previously mentioned are based almost exclusively on the recollections and accounts of several people who knew Salay in person and are not based on researching the archive documents. The following brief account of Salay's career both as an entomologist and museum curator attempts to fill an unwanted hiatus in the knowledge of the history and evolution of the “Grigore Antipa” National Museum of Natural History entomological collections.

Francisc (Franz) Salay was born on April 28, 1861. His father, Stephan, was of Austrian descent, and settled in Bucharest in the middle of the 19th century, where he earned his living as an upholsterer and decorator.

Little Francisc was drawn to nature from his early age. However, the sudden death of his mother, Ana, when he was only 10 years old, and then the premature blindness of his father because of a rapidly progressing cataract prevented him from completing his studies, forcing him to get a job early on. Soon, the state of his father's health steadily worsened, so young Francis was forced for a time to permanently accompany and to take care of him, as it appears from the certificate of dispense issued on February 20, 1883, by the Recruitment Review Board, through which he was exempt from active military duty (Fig. 42). All these hardships hindered the young Salay from giving time to his passion for nature and developing it during his adolescence and early youth.

However, in the spring of 1880 things began to change when he met the Liebrecht brothers, who at the time were catching butterflies for their father's collection. From Carol Liebrecht, a passionate collector, Francisc Salay acquired his first information and skills on collecting, preparing, labelling, and preserving entomological material. Shortly after meeting Carol Liebrecht, Salay began to collect lepidoptera with dedication and passion, spending more and more time in nature or working on his own collection. As a result, in the last decade of the 19th century he entirely devoted himself to building a remarkable entomological collection, in which specimens received, exchanged, or bought from different collectors and insect traders of that time quickly began to add up, along with the specimens he collected personally. Encouraged and supported also by his wife Emma, née Roth, whom he married in 1889, Salay became a hard-working, diligent, but also skilled, meticulous, and passionate collector who managed to enrich his collection rapidly, in a relatively short time.

Franz Salay started volunteering at the museum after his butterfly collection, one of the most impressive in Romania at the beginning of the 20th century, was exhibited at the Royal Jubilee Exhibition organized in Carol Park of Bucharest (June-November 1906). At that exhibition, Salay's collection received the Carol I jubilee gold medal (Fig. 43), and as a result, on February 20, 1907, he received the Order of the Crown of Romania in the rank of knight (Fig. 44). Unfortunately, this brought only a trifling comfort after the immense loss he suffered in 1907, when he was deeply shaken by the sudden death of his wife, succumbed to a pulmonary congestion.

During the award ceremony in which he received the Order of the Crown of Romania in the rank of knight, Salay met Dr. Grigore Antipa, who invited him to join the new team of the natural sciences museum of Bucharest, which was to open soon in a new building, the first one in Romania specially designed and built to house a museum. Although he was no longer young, Salay enthusiastically accepted and as a result he was appointed curator of the museum's entomological collections, a position he held for more than 20 years. At first, Salay took the charge of reorganizing and conserving Eduard Fleck's collection after it came into the

museum's possession. At the same time, through intense and diligent work, Salay managed to obtain for the museum's collection many remarkable specimens from various butterfly collectors and insect traders, such as Hans Fruhstorfer, Max Korb, Max Bartel, Max Fürbringer, Eduard Leinwather, Otto Habich (whom he had personally met through his mentor Carol Liebrecht), Josef Schernhammer, Max Wiskott, Antal Schmidt, Hermann Stauder and Jacob Doll. The goal of this tenacious work was to create a collection as diverse as possible, comprising best preserved specimens of as many species as possible, worthy of a national museum. For this long and remarkable activity, Salay was rewarded by King Carol II with the Order of Cultural Merit with medal, class II, on June 23, 1933 (decree no. 1891; Fig. 45).

Close to the end of his career (Fig. 46), Salay donated his collection of Lepidoptera, numbering 8,630 specimens arranged in 50 high quality drawers, to the museum. His collection was brought to the museum in October 1934 and after that Salay, at that time assistant within the museum, received an official letter of confirmation from the Ministry of Education, Cults and Arts (Fig. 47). On that occasion, he was appointed by Dr. Grigore Antipa "honorary curator", a title he proudly retained until the end of his life. In fact, Salay continued to work at the museum until shortly before his death, even though he was suffering from a cataract that was slowly but steadily progressing past retirement age. For this activity, carried out at such an advanced age, but especially for his outstanding contribution to the foundation and development of the first collection of Lepidoptera owned by the museum, Franz Salay was awarded on March 24, 1944, with the honorary patent "Reward for 25 years worked in the service of the State" (Fig. 48) Remarkably, this was the only known official act in which Salay was referred to as an "entomologist". He died on May 23, 1946, shortly after Prince Aristide Caradja's famous Lepidoptera collection was brought to the museum, after it had been acquired for it by the Ministry of National Culture and Cults.

Although Salay was a keen, self-taught lepidopterist, he understood he lacked a thorough training in entomology. Because of this, he used to send any specimen which he could not properly identify for determination or checking of the determination to renown Romanian entomologists at that time, such as Constantin

Nikolaus Freiherr von Hormuzaki (1862-1937) or Aristide Caradja (1861-1955), a fact remembered and mentioned by Iuga (1966). Finally, that might explain why almost all the specimens of Castniidae presented in this catalogue are accompanied by characteristic, easy to recognise determination labels handwritten by Aristide Caradja.

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Images



Figure 1. *Athis clitarcha* (Westwood, 1877), dorsal view.



Figure 2. *Athis clitarcha* (Westwood, 1877), ventral view.



Figure 3. *Castnia invaria penelope* Schaufuss, 1870, dorsal view.



Figure 4. *Castnia invaria penelope* Schaufuss, 1870, ventral view.



Figure 5. *Castnia invaria volitans* Lamas, 1995, dorsal view.



Figure 6. *Castnia invaria volitans* Lamas, 1995, ventral view.



Figure 7. *Castnia papilionaris papilionaris* Walker, [1865], dorsal view.



Figure 8. *Castnia papilionaris papilionaris* Walker, [1865], ventral view.



Figure 9. *Ceretes marcelserres* (Godart, [1824]), ♂, dorsal view.



Figure 10. *Ceretes marcelserres* (Godart, [1824]), ♂, ventral view.



Figure 11. *Ceretes marcelserres* (Godart, [1824]), ♀, dorsal view.



Figure 12. *Ceretes marcelserres* (Godart, [1824]), ♀, ventral view.



Figure 13. *Eupalamides cyparissias*
(Fabricius, 1776), dorsal view.



Figure 14. *Eupalamides cyparissias*
(Fabricius, 1776), ventral view.



Figure 15. *Imara pallasia*
(Eschscholtz, 1821), dorsal view.



Figure 16. *Imara pallasia*
(Eschscholtz, 1821), ventral view.



Figure 17. *Imara satrapes satrapes*
(Kollar, 1839), dorsal view.



Figure 18. *Imara satrapes satrapes*
(Kollar, 1839), ventral view.



Figure 19. *Prometheus cochrus* (Fabricius, 1787), dorsal view.



Figure 20. *Prometheus cochrus* (Fabricius, 1787), ventral view.



Figure 21. *Prometheus heliconioides dodona* (Druce, 1896), dorsal view.



Figure 22. *Prometheus heliconioides dodona* (Druce, 1896), ventral view.



Figure 23. *Prometheus heliconioides obidona* (Rothschild, 1919), dorsal view.



Figure 24. *Prometheus heliconioides obidona* (Rothschild, 1919), ventral view.



Figure 25. *Prometheus simulans songata* (Strand, 1913), dorsal view.



Figure 26. *Prometheus simulans songata* (Strand, 1913), ventral view.



Figure 27. *Telchin cacica procera* (Boisduval, [1875]), ♂, dorsal view.



Figure 28. *Telchin cacica procera* (Boisduval, [1875]), ♂, ventral view.



Figure 29. *Telchin cacica procera* (Boisduval, [1875]), ♀, dorsal view.



Figure 30. *Telchin cacica procera* (Boisduval, [1875]), ♀, ventral view.



Figure 31. *Telchin diva chiriquiensis* (Strand, 1913), dorsal view.



Figure 32. *Telchin diva chiriquiensis* (Strand, 1913), ventral view.



Figure 33. *Telchin evalthe cuyabensis* (Lathy, 1922), dorsal view.



Figure 34. *Telchin evalthe cuyabensis* (Lathy, 1922), ventral view.



Figure 35. *Telchin evalthe vicina* (Houlbert, 1917), dorsal view.



Figure 36. *Telchin evalthe vicina* (Houlbert, 1917), ventral view.



Figure 37. *Telchin licus licus*
(Drury, 1773), dorsal view.



Figure 38. *Telchin licus licus*
(Drury, 1773), ventral view.



Figure 39. *Synpalamides fabricii*
(Swainson, 1823), dorsal view.



Figure 40. *Synpalamides fabricii*
(Swainson, 1823), ventral view.



Figure 41. Francisc (Franz) Salay (1861-1946) at the age of 55.

Județul Ujor Model Nr. 2
Plasa Col Bezine
Comuna Bucurari Clasa anului 188 3

CERTIFICAT DE DISPENSĂ

Consiliul de revizie al Recrutării

Având în vedere Art. 18, alin. 1 din legea de recrutare, care dispensează de serviciul armatei active în timp de pace pe tinerii aflați^{*)} având vârstă de

Având în vedere actele prezentate de ténérul Salay Francisc și
fiul lui Salay născut la anul 18 67 în
al nu are comuna Bucurari plasa
județul Ujor și actualmente domiciliat în comuna
Bucurari plasa județul
Ujor având perul scorțit sprân-
penile scorțite ochii fruntea
nasul gura barbia obrațul
tală semne particulare
de profesie Le Mar și înscris pe
tabelele de recensământ la Nr. 181 prin care se constată că el este^{*)}
Salay Francisc

Consiliul, în unanimitate de voturi, dispensează pe ténérul Salay Francisc de serviciul armatei active, numai în timp de pace, rămânând însă a fi chemat în timp de rebel cu clasa căia aparține.

Dat astăzi la 20 Februar la 1883 în Bucurari

Lobail
Francisc
Salay

Vigat și trecut în Registrul matricul în Nr. 101

Sotul de depozitului de recrutare

Salay

1883

^{*)} Ca cel mai în vârstă dintre orfani; Unicul fiu la părinți înaintați, etc. etc. etc.

Tip. Mat. Gr. L. 1883

Figure 42. Certificate of dispense issued on February 20, 1883, by the Recruitment Review Board, through which Francisc Salay was exempt from military active duty.



Figure 43. The patent that accompanied the Carol I jubilee gold medal granted to Francisc Salay (May 10, 1906).

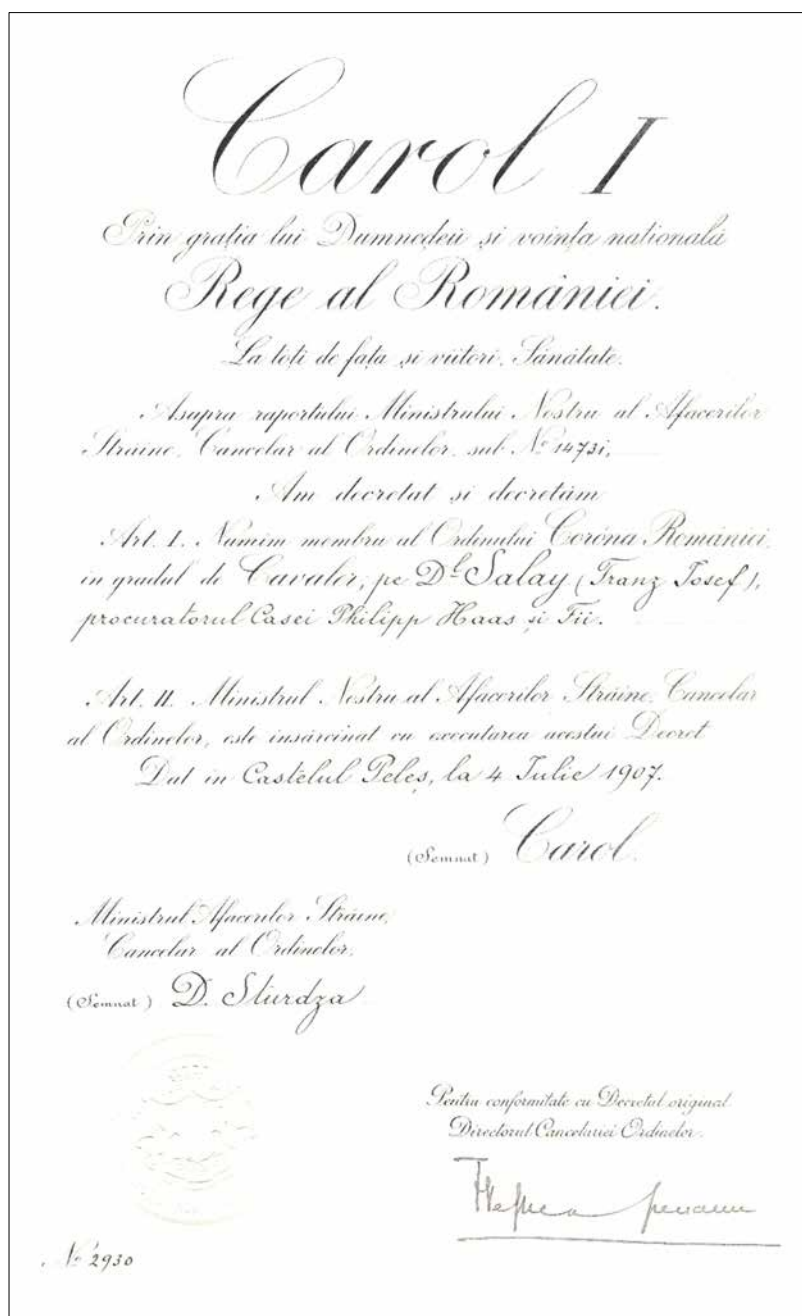


Figure 44. The diploma of the Order of the Crown of Romania in the rank of knight received by Francis Salay on February 20, 1907.

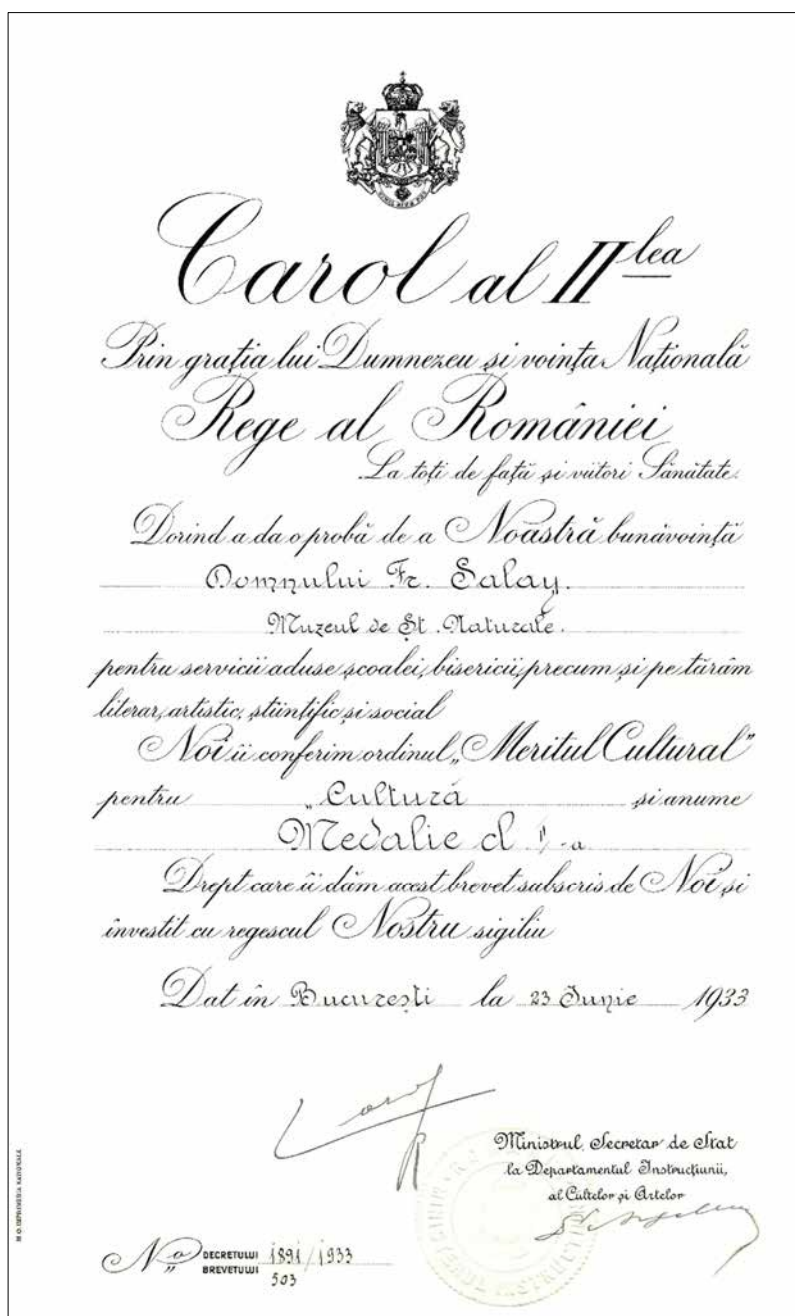


Figure 45. The decree 1891 from June 23, 1933, by which Francisc Salay is granted the Order of Cultural Merit with medal, 2nd class.



Figure 46. Francisc (Franz) Salay at the age of 74, assistant at the “Grigore Antipa” National Museum of Natural History.

ROMÂNIA



MINISTERUL INȘTRUCȚIUNII, AL CULTELOR ȘI ARTELOR

DIRECȚIUNEA ÎNVĂȚĂMÂNTULUI SUPERIOR

Adresa poștală : Str. Spiru Haret, 14, s. II Telefon : 3.0313 și 3.1679

D-lui Franz Salay asistent
la Muzeul de Istorie Naturală
"Gr. Antipa" Loco. 162011/934

Dosarul și Nr. dv.	Data dv.	Dosarul și Nr. nostru (a se repeta în răspuns)	Data
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Privește:

Prin adresa Nr.123 din 4 Octombrie 1934,
Direcțiunea Muzeului de Istorie Naturală "Gr.
Antipa" din București, ne aduce la cunoștință
că Dv. ași donat acelei Instituțiuni o valoroasă
colecție de Lepidoptere, constând din 8630 exem-
plare, în 50 cutii.

Ministerul Instrucțiunii, luând act cu satis-
facție de această donațiune, vă exprimă calduroase
mulțumiri.

/ M I N I S T R U


Director General,


C. 2310K - M. O. Imprimeria Centrală.

Format A 4 (210x297).

Figure 47. Letter confirming the donation of the Lepidoptera collection to the "Grigore Antipa" National Museum of Natural History, received by Francisc Salay from the Ministry of Education, Cults and Arts (November 1934).

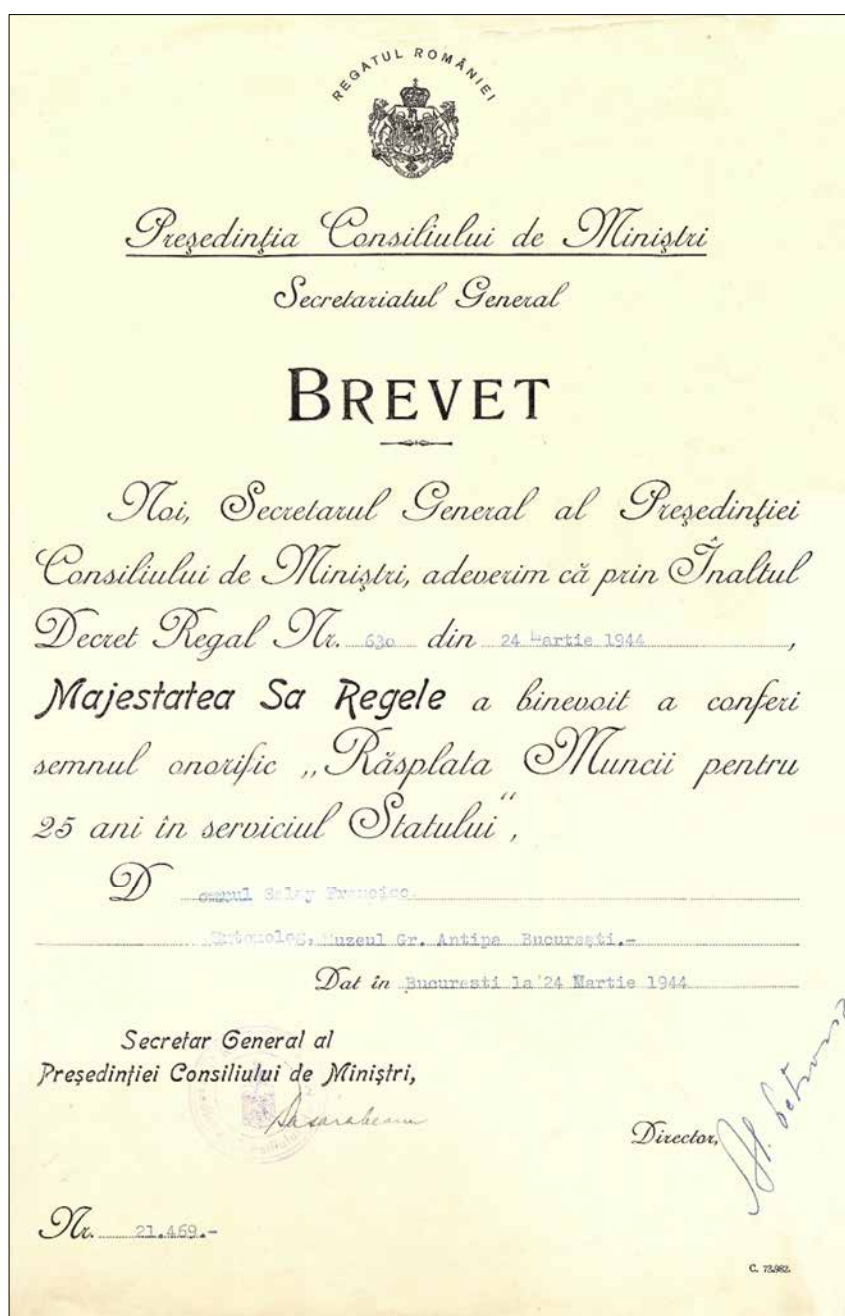


Figure 48. The diploma of the honorary patent "Reward for 25 years worked in the service of the State", received by Francisc Salay on March 24, 1944.

