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Violaine NICOLAS,
Jean-Pierre HUGOT & Raphaël CORNETTE

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Toulouse Museum specimen of *Talpa europaea* Linnaeus, 1758 from 1758, discovered at Maourine pond, Toulouse, France. Photo: Didier Descouens. Creative Commons Attribution.

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New data on the distribution of the two mole species *Talpa aquitania* Nicolas, Matinez-Vargas & Hugot, 2017 and *T. europaea* Linnaeus, 1758 in France based on museum and newly collected specimens

Violaine NICOLAS
Jean-Pierre HUGOT
Raphaël CORNETTE
Institut de Systématique, Évolution, Biodiversité (ISYEB),
Muséum national d'Histoire naturelle, CNRS, Sorbonne Université, EPHE, Université des Antilles
case postale 51, 57 rue Cuvier, F-75231 Paris cedex 05 (France)
violaine.colin@mnhn.fr (corresponding author)
jean-pierre.hugot@mnhn.fr
raphael.cornette@mnhn.fr

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ABSTRACT
A new species of mole, *Talpa aquitania* Nicolas, Martínez-Vargas & Hugot, 2017, was recently described from France. Based on the genetic identification of 270 individuals it was hypothesized that *T. aquitania* and *T. europaea* Linnaeus, 1758 are allopatric, being distributed on opposite sides of the Loire River, with the exception of a small area of sympatry in eastern Pyrénées mountains. The aim of the present study is to get a better understanding of the distribution of these two species in France based on the re-identification of museum specimens and extensive field sampling through a citizen science study. 1099 specimens were identified at the specific level (574 *T. europaea* and 525 *T. aquitania*) based on external characteristics, molar tooth morphology and/or genetic data. Our results confirm that *T. aquitania* is mainly distributed south and west of the Loire River, while the reverse is true for *T. europaea*. However, the Loire River is not a strict biogeographic barrier between these two species: several specimens of *T. aquitania* were recorded north and east of the Loire River in the Loire-Atlantique, Loiret and Nièvre departments. Moreover, two specimens were captured in the Var department. Several specimens of *T. europaea* were captured south and west of the Loire River in the Indre-et-Loire, Loir-et-Cher, Loiret and Loire departments. Furthermore, both species were found in sympatry or in close proximity in the Pyrénées Mountains. The role of climate, soil type, food resources abundance (earthworms) and historical factors in explaining the actual distribution of these species is discussed.

KEY WORDS
Talpa aquitania, *Talpa europaea*, France, distribution, mammals.

RÉSUMÉ

Nouvelles données sur la distribution des deux espèces de taupe Talpa aquitania *Nicolas, Martínez-Vargas & Hugot, 2017 et* T. europaea *Linnaeus, 1758 en France à partir de spécimens de musée et de spécimens nouvellement collectés.*

Une nouvelle espèce de taupe, *Talpa aquitania* Nicolas, Martínez-Vargas & Hugot, 2017, a récemment été décrite de France. Le génotypage de 270 individus a permis de proposer pour les espèces *T. aquitania* et *T. europaea* Linnaeus, 1758 une distribution allopatrique, de part et d'autre du cours de la Loire, à l'exception toutefois d'une petite zone de contact à l'est de Pyrénées. Le but de la présente étude est de préciser les distributions géographiques respectives de ces deux espèces en France. Ce travail repose sur un important effort de collecte via les sciences participatives et sur la ré-identification des spécimens de musées. 1099 spécimens (574 *T. europaea* et 525 *T. aquitania*) ont ainsi pu être identifiés à partir de leur morphologie externe ou dentaire, et/ou de données génétiques. Si nos résultats confirment que *T. aquitania* est majoritairement présente au sud et à l'ouest de la Loire, ils montrent aussi que cette barrière biogéographique n'est pas stricte : plusieurs spécimens de *T. aquitania* ont été capturés au nord et à l'est de la Loire dans les départements de la Loire-Atlantique, du Loiret et de la Nièvre, et deux spécimens l'ont été dans le département du Var. Réciproquement, plusieurs spécimens de *T. europaea* ont été capturés au sud et à l'ouest de la Loire, dans les départements de l'Indre-et-Loire, du Loir-et-Cher, du Loiret et de la Loire. Enfin, les deux espèces sont en sympatrie ou proche géographiquement dans les Pyrénées. Le rôle du climat, du type de sol, de l'abondance des ressources alimentaires (vers de terre) et des processus historiques sur la distribution de ces deux espèces sont discutés.

MOTS CLÉS
Talpa aquitania, *Talpa europaea*, France, distribution, mammifères.

INTRODUCTION

Mammalian systematics is dynamic, with a long-term global rate of 25 new species recognized per year (Burgin *et al.* 2018). In the last 10 years numerous progress were made regarding our knowledge of the species diversity, systematic relationships and geographical distribution of mole species of the genus *Talpa* Linnaeus, 1758. This genus is endemic to the western Palaearctic region and is well known to the public through its characteristic heaps of soil, i.e., the molehills. The number of species within this genus was heavily underestimated for a long time because of their cryptic morphology linked to their semi-fossorial lifestyle. However between 2005 and 2020, the number of recognized species increased of 56%, from nine (Hutterer 2005) to 14 (Kryštufek *et al.* 2017; Kryštufek & Motokawa 2018; Demırtaş *et al.* 2020). This spectacular increase was possible due to the development of molecular tools in alpha systematics combined with a wide taxonomic sampling.

In 2017, Nicolas *et al.* (2017a) described a new species from France, *Talpa aquitania* Nicolas, Martínez-Vargas & Hugot, 2017, based on molecular (mitochondrial gene sequencing) and morphological data (eyelids fused together or not, and form of the mesostyle of the first, second and third upper molar). Nuclear data based on the HDAC2 gene confirmed the distinctiveness of this species (Nicolas *et al.* 2017b). Based on genetic identification of 270 individuals from France it was hypothesized that *T. aquitania* and *T. europaea* Linnaeus, 1758 may be allopatric, the first one being distributed south and west, and the second one north and east of the Loire River. However, two specimens of *T. europaea* were captured in the locality of Mosset in the Pyrenees mountains, inside the expected geographical range of *T. aquitania* (Nicolas *et al.* 2017b). More recently Rosoux & Lemarchand (2020) mentioned the capture of three specimens of *T. aquitania* north of the Loire River in the locality of Bray-Saint-Aignan (Loiret department), and Poitevin & Quéré (2021) mentioned it east of the Loire River in the Ardèche and Loire departments.

Species distribution data are useful not only for population monitoring, biodiversity mapping and conservation management (Reese *et al.* 2005), but also in evolutionary studies aiming to understand the processes that lead to species distribution. Ultimately, spatial distributions of species are limited by three broad groups of constraints (Stewart *et al.* 2015): 1) tolerance of physical environmental conditions (temperature, pH, humidity, etc.), including both insurmountable physical barriers, such as rivers, oceans or mountains, but also spatial gradients in, for example, climatic variables (temperature, precipitation), or soil and water chemistry; 2) the availability and spatial distribution of resources (food, nest sites, shelter, etc.); and 3) interactions with other species, including predation, competition, mutualism, and parasitism/disease. History may also have an influence (e.g. where the location of an introduction or of refugia during previous range shifts determines the pattern of subsequent geographical spread). Although cases may exist where a single factor limits the distribution of a species, it is undoubtedly more likely that combinations of factors act synergistically, antagonistically, or independently of one another in limiting the expansion of species beyond their current range limits (Mott 2010).

Based on the re-identification of museum specimens and an extensive field sampling through a citizen science study, the aim of the present work is to get a better understanding of the distribution of the two mole species in France and the factors explaining it.

MATERIAL AND METHODS

This study includes only specimens whose species identification has been confirmed by the authors and does not includes bibliographical data only.

Specimens from the following museums were included in this study: MNHN (France), MHNL (France), MHNN (France), MHNA (France), MZS (France), Muséum d'Histoire naturelle d'Aix-en-Provence (France), Muséum d'Histoire naturelle de Bourges (France), Muséum-Aquarium de Nancy (France), MHNGr (France), MHNT (MHNT), Muséum d'Histoire naturelle de Bayonne (France), BMNH (United Kingdom), MHNG (Switzerland), MVZ (USA) and NMNH (USA).

In order to include as many specimens as possible a citizen science study was developed. Numerous professional mole trappers and French naturalists sent us new records (either mole bodies in alcohol, skulls, tissues in ethanol or pictures of the eyes or the molars). Species records validated by genetic data and present in the Genbank database were also included.

1099 specimens from France were identified at the specific level (574 *T. europaea* and 525 *T. aquitania*; Appendices 1 and 2) based on external characteristics (open eyes in *T. europaea;* eyelids fused together in *T. aquitania*); molar tooth morphology (in *T. europaea* the mesostyles of the upper second molar (M2) and the third upper molar (M3) are divided into two cusps of subequal size, and they are aligned on a plane that extends parallel to the parastyle and the metastyle; *T. aquitania* specimens have either a simple mesostyle in M2 or an additional minute cusp, but unlike *T. europaea* this cusp is much smaller than the main cusp of the mesostyle and is located in the crest that connects the mesostyle to the metacone of M2 that is in a more lingual position than the mesostyle itself; in some *T. aquitania* specimens the mesostyle of M3 is composed on a main anterior cusp and a slightly smaller posterior cusp, while in other specimens this posterior cusp is not clearly discernible because its posterior border is fused to the crest that runs from the mesostyle to the metacone of M3) and/or genetic data following Nicolas *et al.* (Nicolas *et al.* 2017a, b). For specimens identified based on molar tooth morphology only adult specimens with unworn molars were considered (the pattern on the mesostyle cannot be determined on worn molars).

The locality of collect was known for 1058 specimens. Species records were mapped using DIVA-GIS 7.5.0.0 software. When available, exact GPS coordinates of the capture site were used. For museum specimens, when precise GPS coordinates were not available, they were estimated based on locality names and the use of public database such as mapawi.com or google earth.

Abbreviations

Institutions

MNHN	Muséum national d'Histoire naturelle, Paris;
MHNL	Muséum d'Histoire naturelle de Lyon;
MHNN	Muséum d'Histoire naturelle de Nantes;
MHNA	Muséum des Sciences naturelles d'Angers;
MZS	Musée Zoologique de Strasbourg, Strasbourg;
MHNGr	Muséum d'Histoire naturelle de Grenoble, Grenoble;
MHNT	Muséum d'Histoire naturelle de Toulouse;
BMNH	Natural History Museum, London;
MHNG	Muséum d'Histoire naturelle de Genève;
MVZ	Museum of Vertebrate Zoology at the University of California, Berkeley;
NMNH	Smithsonian National Museum of Natural History, Washington.

RESULTS

Our results confirm that *T. aquitania* is mainly distributed south and west of the Loire River, while *T. europaea* is mainly distributed north and east of it (Fig. 1). However, the Loire River is not a strict biogeographic barrier between these two species: several specimens of *T. aquitania* were recorded north and east of the Loire River in the Loire-Atlantique (locality of Pontchâteau), Loiret (Bray-Saint-Aignan) and Nièvre (Gouloux and Montsauche-les-Settons) departments. Moreover two specimens, identified based on molars morphology, were captured in southern France in the Var department (Saint-Raphaël). Several specimens of *T. europaea* were captured south and west of the Loire River in the Indre-et-Loire (Tours, la Ville-aux-Dames), Loir-et-Cher (Saint-Aignan, Sassay, Neuvy, Sologne region), Loiret (Isde) and Loire (Saint-Haon-le-Châtel) departments. Furthermore, in the Pyrénées Mountains both species are found in sympatry or close proximity in the Pyrénées-Orientales (Mosset) and in south of the Haute-Garonne (Juzet-de-Luchon and Luchon). The two specimens of *T. europaea* found in Mosset were identified based on molecular analyses (both mitochondrial and nuclear data), and the specimen from Juzet-de-Luchon was identified based on molar morphology.

All records were double checked to be sure that there is no mislabelling or taxonomic misidentification. One could argue that morphological traits are not always clear-cuts and that taxonomic misidentification is possible when it is based on only one morphological character. Even if it can never be completely ruled out, we are confident in our species identification because we had a perfect match (100% identity) between our identifications based on molecular data and morphological characters for the 351 specimens identified based on the two structures (121 specimens identified based on both molecular data and eyes morphology, and 230 specimens identified based on both molecular data and molars morphology).

DISCUSSION

This study shows that while *T. aquitania* is mainly distributed south and west of the Loire River, and *T. europaea* north and east of it, the Loire River is not a strict biogeographic barrier between the two species. This is not surprising given that moles are able to swim for 30-50 minutes, during which they can cover distances of over 1 km (Gorman & Stone 1990). Other big rivers like the Seine, the Garonne or the Rhine do not constitute effective barriers to geographical dispersal of French moles.

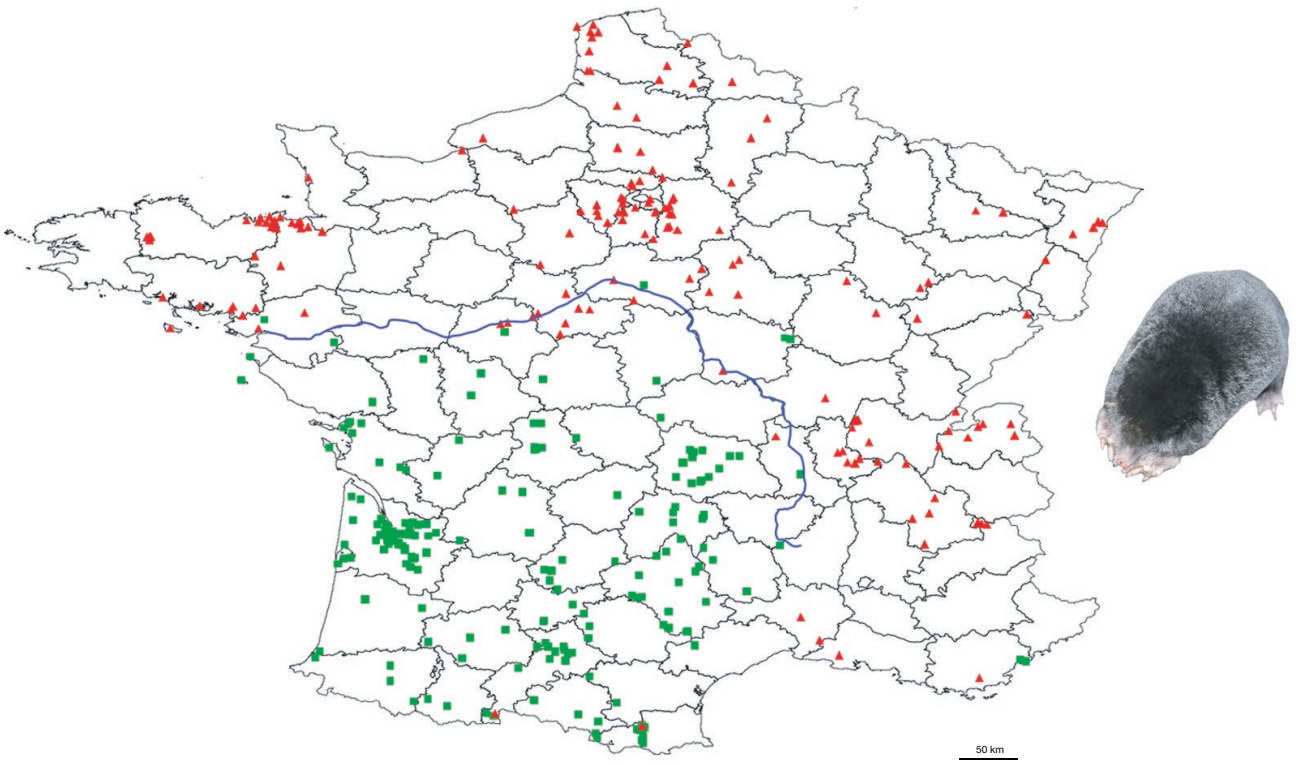

Fig. 1. — Map of the distribution of *Talpa aquitania* Nicolas, Martínez-Vargas & Hugot, 2017 (■) and *T. europaea* Linnaeus, 1758 (▲) in France based on 1058 verified species records. The Loire River is indicated in blue, and department boundaries are in black.

According to Nicolas *et al.* (2017b), who modelled the climatically favourable areas for the two mole species on the basis of environmental niche models, climatic factors only partly explain the actual distribution of these species. In fact, the actual distribution of both species, and particularly those of *T. aquitania*, is much more reduced that expected based on climatic variables alone. Thus, the factors explaining the current distribution of these two species are probably not only climatic.

Species interactions (e.g. mutual competitive exclusion, predation, parasitism, mutualism) are also important in determining species distribution (Pearman *et al.* 2008; Sinclair *et al.* 2010; Giannini *et al.* 2013). Mutual competitive exclusion between the two French mole species may explain their geographical distribution. Sympatric tandems of congeneric moles occur in North America (genus *Scapanus* Pomel, 1848), the Mediterranean area (genus *Talpa*) and eastern Asia (genus *Mogera* Pomel, 1848) (Kryštufek & Motokawa 2018). Species in such tandems differ in size, and the larger mole is normally more abundant and widespread and occupies a broadest niche. It was shown that despite their widely corresponding distributions and their non-overlapping sizes, the co-occurring moles are only exceptionally syntopic, and can co-occur only if they occupy different habitat patches in a habitat mosaic (Kryštufek & Motokawa 2018). For example, in the Japanese moles, the dominant mole species, *Mogera wogura* (Temminck, 1842), is progressively expanding its range northwards, displacing the small inferior species *M. imaizumii* (Kuroda, 1957) (Abe 2001). Soil hardness is an important factor affecting the geographical distribution of these species and it allows their coexistence only under very specific circumstances. In other subterranean mammals, like pocket gophers, interspecific differences in body size and digging strategy have been shown to confer competitive dominance of one species over another depending on soil characteristics (Marcy *et al.* 2013). In regions where divergent soil types co-occur, the ranges of different pocket gopher species can overlap (Thaeler 1968). Significant body size differences between *T. aquitania* and *T. europaea* were found (Nicolas *et al.* 2017b). Studies are underway to test how these differences in body size, and potentially other morphological differences in anterior limb and hand morphology, affect the digging behaviour of these moles and their competitive dominance. It is interesting to note that areas of contact between the two French mole species correspond to highly heterogeneous lithological areas: areas of sympatry in the Pyrénées-Orientales, Haute-Garonne, Loire-Atlantique, Nièvre and Var departments correspond mostly to a mixture of Acid Plutonic Rocks and Metamorphic Rocks, and areas of sympatry in the Indre-et-Loire and Loiret departments correspond mostly to a mixture of Siliciclastic Sedimentary Rocks and Unconsolidated Sediments (Hartmann & Moosdorf 2012). More data on the ability of moles to dig in different soil types are harshly needed to test whether interspecific differences in body size and digging strategy explain the mostly

allopatric distribution of these two species and their possible coexistence in few highly heterogeneous lithological areas.

Due to its small stomach capacity, fast digestion and low fat storage in tissues moles can endure only short periods of fasting, and are constantly in search of food during most of their active time (Kryštufek & Motokawa 2018). Several studies suggested that food is an important limiting factor affecting the spatial distribution and abundance of moles (Beolchini *et al.* 1996; Loy & Capanna 1998). Moles are mainly earthworm feeders, even if there may be seasonal and regional differences in the importance of earthworms in their diet (Gorman & Stone 1990; Kryštufek & Motokawa 2018). Earthworm abundance is not evenly distributed in France, being strongly affected by land use, climate-related parameters (e.g. soil moisture), vegetation, soil texture, soil organic matter and soil pH (Rutgers *et al.* 2016; Phillips *et al.* 2019). It is much lower is the south-western part of France (less than 50 individuals/m^2) than in the rest of the country (mostly 100-500 individuals/m^2), and this area of low earthworm abundance matches pretty well the distribution of *T. aquitania*. Additional data are needed on the diet of the two mole species in France and their ability to catch and consume different kind of prey, and on the competitive behavior. Unpublished geometric morphometric analyses showed significant differences in both size and shape of the skulls and mandibles of the two species suggesting different bite force and olfactory capacities (Martínez-Vargas *et al.* comm pers.)

Finally, historical processes are also important in explaining species present-day distribution. The time of divergence between the two mole species is dated back to the Pliocene-Pleistocene boundary (Feuda *et al.* 2015; Nicolas *et al.* 2017b). Climatic oscillations leading to extreme drought or freezing, which dramatically increase hardness of soils and lower the availability of feeding resources represented by the foil fauna, have a significant impact on moles (Gorman & Stone 1990). During the Quaternary Period, which was dominated by Ice Ages and involved repeated global cooling, moles were frequently isolated in several glacial refuges, their populations expanding again during interglacial periods (Feuda *et al.* 2015; Nicolas *et al.* 2017b). Their current distribution would thus depend on their capacity to disperse from these refuges. The populations of *T. aquitania* in the Var department and of *T. europaea* in the Pyrénées Mountains may correspond to relict populations dating form glacial periods: climatic niche modelling analyses based on the Model for Interdisciplinary Research on Climate highlighted a high probability of presence of these species during the Last Glacial Maximum in these areas (Nicolas *et al.* 2017b).

To conclude, historical processes, contemporary environmental variables and species interactions are probably important in explaining the distribution of the two mole species in France. Our study represents an important step toward a better understanding of the geographical distribution of these moles. However, more occurrence data are still needed in south-eastern France, Pyrénées Mountains and along the Loire River to complete the maps. Moreover, precise data on the habitat of collect (including both abiotic and biotic data) of each specimen are required. This kind of data could maybe help us to explain the presence of *T. aquitania* in the Var department and of *T. europaea* in the Pyrénées Mountains. A multidisciplinary project including geometric morphometry, functional morphology, diet and behaviour analyses is underway to better understand species digging ability, their ability to catch and consume different kinds of prey and their competitive behaviour.

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REFERENCES

Abe H. 2001. — Soil hardness, a factor affecting the range expansion of *Mogera wogura* in Japan. *Mammal Study* 26: 45-52. https://doi.org/10.3106/mammalstudy.26.45

Beolchini F., Dupré E. & Loy A. 1996. — Territorial behaviour of *Talpa romana* in two different habitats: food resources and reproduc-

tive needs as potential causes of variation. *Zeitschrift für Säugetierkunde* 61: 193-201. https://doi.org/10.1080/11250009409355887

Burgin C., Colella J. P., Kahn P. & Upham N. S. 2018. — How many species of mammals are there? *Journal of Mammalogy* 99: 1-14. https://doi.org/10.1093/jmammal/gyx147

Demirtaş S., Silsüpür M., Searle J. B., Bilton D. & Gündüz İ. 2020. — What should we call the Levant mole? Unravelling the systematics and demography of *Talpa levantis* Thomas, 1906 *sensu lato* (Mammalia: Talpidae). *Mammalian Biology* 100: 1-18. https://doi.org/10.1007/s42991-020-00010-4

Feuda R., Bannikova A. A., Zemlemerova E. D., Febbraro M., Loy A., Hutterer R., Aloise G., Zykov A. E., Annesi F. & Colangelo P. 2015. — Tracing the evolutionary history of the mole, *Talpa europaea*, through mitochondrial DNA phylogeography and species distribution modelling. *Biological Journal of the Linnean Society* 114: 495-512. https://doi.org/10.1111/bij.12459

Giannini T. C., Chapman D. S., Saraiva A. M., Alves-dos-Santos I. & Biesmeijer J. C. 2013. — Improving species distribution models using biotic interactions: a case study of parasites, pollinators and plants. *Ecography* 36: 649-656. https://doi.org/10.1111/j.1600-0587.2012.07191.x

Gorman M. L. & Stone R. D. 1990. — The natural history of moles. Christopher Helm Publications, London, 138

Hartmann J. & Moosdorf N. 2012. — The new global lithological map database GLiM: A representation of rock properties at the Earth surface. *Geochemistry, Geophysics, Geosystems* 113: Q12004. https://doi.org/10.1029/2012GC004370

Hutterer R. 2005. — Order Soricomorpha, *in* Wilson D. E. & Reeder D. M. (eds), *Mammal Species of the World: A Taxonomic and Geographic Reference, third ed.* Johns Hopkins University Press, Baltimore: 220-311.

Kryštufek B. & Motokawa M. 2018. — Family Talpidae (Moles, desmans, star-nosed moles and shrew moles), *in* Wilson D. E., Lacher T. A. & Mittermeier R. A. (eds), *Handbook of the Mammals of the World. Vol. 8. Insectivores, sloths and colugos*. Lynx Edicions, Barcelona, 552-619.

Kryštufek B., Nedyalkov N., Astrin J. J. & Hutterer R. 2017. — News from the Balkan refugium: Thrace has an endemic mole species (Mammalia: Talpidae). *Bonn zoological Bulletin* 67: 41-57.

Loy A. & Capanna E. 1998. — A parapatric contact area between two species of moles (genus *Talpa*): character displacement investigated through the geometric morphometric of skull. *Acta Zoologica Academiae Scientiarum Hungaricae* 44: 151-164.

Marcy A. E., Fendorf S., Patton J. L. & Hadly E. A. 2013. — Morphological adaptations for digging and climate-impacted soil properties define Pocket Gopher (*Thomomys* spp.) Distributions. *Plos One* 8: e64935. https://doi.org/10.1371/journal.pone.0064935

Mott L. 2010. — Environmental Constraints to the Geographic Expansion of Plant and Animal Species. *Nature Education Knowledge* 3: 72.

Nicolas V., Martínez-Vargas J. & Hugot J.-P. 2017a. — *Talpa aquitania* sp. nov. (Talpidae, Soricomorpha), a new mole species from SW France and N Spain *Mammalia* 81: 641-642. https://doi.org/10.1515/mammalia-2017-0057

Nicolas V., Martínez-Vargas J. & Hugot J.-P. 2017b. — Molecular data and ecological niche modelling reveal the evolutionary history of the common and Iberian moles (Talpidae) in Europe. *Zoologica Scripta* 46: 12-26. https://doi.org/10.1111/zsc.12189

Pearman P. B., Guisan A., Broennimann O. & Randin C. F. 2008. — Niche dynamics in space and time. *Trends in Ecology & Evolution* 23: 149-158. https://doi.org/10.1016/j.tree.2007.11.005

Phillips H. R. P., Guerra C. A., Bartz M. L. C., Briones M. J. I., Brown G., Crowther T. W., Ferlian O., Gongalsky K. B., van den Hoogen J., Krebs J., Orgiazzi A., Routh D., Schwarz B., Bach E. M., Bennett J., Brose U., Decaens T., König-Ries B., Loreau M., Mathieu J., Mulder C., van der Putten W. H., Ramirez K. S., Rillig M. C., Russell D., Rutgers M., Thakur M. P., de Vries F. T., Wall D. H., Wardle D. A., Arai M., Ayuke F. O., Baker G. H., Beausejour R., Bedano J. C., Birkhofer K., Blanchart E., Blossey B., Bolger T., Bradley R. L., Callaham M. A., Capowiez Y., Caulfield M. E., Choi A., Crotty F. V., Davalos A., Cosin D. J. D., Dominguez A., Duhour A. E., van Eekeren N., Emmerling C., Falco L. B., Fernandez R., Fonte S. J., Fragoso C., Franco A. L. C., Fugere M., Fusilero A. T., Gholami S., Gundale M. J., Lopez M. G., Hackenberger D. K., Hernandez L. M., Hishi T., Holdsworth A. R., Holmstrup M., Hopfensperger K. N., Lwanga E. H., Huhta V., Hurisso T. T., Iannone B. V., 3rd, Iordache M., Joschko M., Kaneko N., Kanianska R., Keith A. M., Kelly C. A., Kernecker M. L., Klaminder J., Kone A. W., Kooch Y., Kukkonen S. T., Lalthanzara H., Lammel D. R., Lebedev I. M., Li Y., Lidon J. B. J., Lincoln N. K., Loss S. R., Marichal R., Matula R., Moos J. H., Moreno G., Moron-Rios A., Muys B., Neirynck J., Norgrove L., Novo M., Nuutinen V., Nuzzo V., Rahman P. M., Pansu J., Paudel S., Peres G., Perez-Camacho L., Pineiro R., Ponge J. F., Rashid M. I., Rebollo S., Rodeiro-Iglesias J., Rodriguez M. A., Roth A. M., Rousseau G. X., Rozen A., Sayad E., van Schaik L., Scharenbroch B. C., Schirrmann M., Schmidt O., Schroder B., Seeber J., Shashkov M. P., Singh J., Smith S. M., Steinwandter M., Talavera J. A., Trigo D., Tsukamoto J., de Valenca A. W., Vanek S. J., Virto I., Wackett A. A., Warren M. W., Wehr N. H., Whalen J. K., Wironen M. B., Wolters V., Zenkova I. V., Zhang W., Cameron E. K. & Eisenhauer N. 2019. — Global distribution of earthworm diversity. *Science* 366: 480-485. https://doi.org/10.1126/science.aax4851

Poitevin F. & Quéré J.-P. 2021. — *Insectivores et rongeurs du Sud de la France*. Editions Ecologistes de l'Euzière, Montpellier, 408 p.

Reese G. C., Wilson K. R., Hoeting J. A. & Flather C. H. 2005. — Factors affecting species distribution predictions: A simulation modeling experiment. *Ecological Applications* 15: 554-564. https://doi.org/10.1890/03-5374

Rosoux R. & Lemarchand C. 2020. — Une nouvelle espèce de mammifère pour la région Centre-Val de Loire. *Recherches naturalistes* 10: 7-9.

Rutgers M., Orgiazzi A., Gardi C., Rombke J., Jansch S., Keith A. M., Neilson R., Boag B., Schmidt O., Murchie A. K., Blackshaw R. P., Peres G., Cluzeau D., Guernion M., Briones M. J. I., Rodeiro J., Pineiro R., Cosin D. J. D., Sousa J. P., Suhadolc M., Kos I., Krogh P. H., Faber J. H., Mulder C., Bogte J. J., van Wijnen H. J., Schouten A. J. & de Zwart D. 2016. — Mapping earthworm communities in Europe. *Applied Soil Ecology* 97: 98-111. https://doi.org/10.1016/j.apsoil.2015.08.015

Sinclair S. J., White M. D. & Newell G. R. 2010. — How useful are species distribution models for managing biodiversity under future climates? *Ecology and Society* 15: 8.

Stewart A. J. A., Bantock T. M., Beckmann B. C., Botham M. S., Hubble D. & Roy D. B. 2015. — The role of ecological interactions in determining species ranges and range changes. *Biological Journal of the Linnean Society* 115: 647-663. https://doi.org/10.1111/bij.12543

Thaeler C. S. 1968. — An Analysis of the Distribution of Pocket Gopher Species in Northeastern California (Genus *Thomomys*). University of California Press, Berkeley, 46

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APPENDICES

Appendix 1. — Details on the specimens of *T. aquitania* Nicolas, Martínez-Vargas & Hugot, 2017 included in this study with their geographic origin, collector name and how the species identification was carried out (DNA: genetic analysis based on Cytochrome b sequencing, Eyes: morphology of the eylelids, Molars: morphology of the molars). Abbreviations: **Lat.**, latitude; **Long.**, longitude; **Post.**, Postal code.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
–	LPO Aveyron 9	2019.03.29	Ardèche (07)	07470	Coucouron, Montlaur	44.787	3.969	Grèzes Jean-Philippe	Eyes	–
NMNH 152332	–	–	Ariège (09)	09110	Ax-les-Thermes	42.716	1.833	Builles V.	Eyes	–
NMNH 152333	–	–	Ariège (09)	09110	Ax-les-Thermes	42.716	1.833	Builles V.	Eyes	–
MNHN-ZM-MO-1993-4174	–	1969.04.10	Ariège (09)	09200	Moulis	42.966	1.083	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-691	–	1969.04.18	Ariège (09)	09200	Moulis	42.966	1.083	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-692	–	1969.04.01	Ariège (09)	09200	Moulis	42.966	1.083	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-694	–	1969.03.28	Ariège (09)	09200	Moulis	42.966	1.083	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-695	–	1969.03.29	Ariège (09)	09200	Moulis	42.966	1.083	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-696	–	1969.04.25	Ariège (09)	09200	Moulis	42.966	1.083	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-703	–	1972.06.26	Ariège (09)	09200	Moulis	42.966	1.083	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-705	–	1972.06.23	Ariège (09)	09200	Moulis	42.966	1.083	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-706	–	1972.06.02	Ariège (09)	09200	Moulis	42.966	1.083	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-707	–	1972.05.30	Ariège (09)	09200	Moulis	42.966	1.083	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-708	–	1971.09.29	Ariège (09)	09200	Moulis	42.966	1.083	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1994-2163	–	1905.05.22	Ariège (09)	09200	Moulis	42.966	1.083	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-702	–	1972.05.23	Ariège (09)	09200	Moulis	42.961	1.091	Saint Girons Marie-Charlotte	Molars, DNA	KU189583
NMNH 152330	2591	1906.08.24	Ariège (09)	09390	L'Hospitalet-près-l'Andorre	42.583	1.800	Robert A.	Molars	–
NMNH 152331	2592	1906.08.24	Ariège (09)	09390	L'Hospitalet-près-l'Andorre	42.583	1.800	Robert A.	Molars	–
BMNH 51.42	–	1905.05.04	Ariège (9)	09400	Tarascon-sur-Ariège	42.800	1.600	–	Molars	–
–	LPO Aude 2	2019.08.15	Aude (11)	11230	Puivert, Coume Gounde	42.933	2.05	Riols Christian (LPO Aude)	Eyes	–
–	LPO Aude 1	2020.01.25	Aude (11)	11420	Molandier, Paulinois	43.250	1.733	Riols Christian (LPO Aude)	Molars	–
–	LPO Aveyron 13	2019.03.08	Aveyron (12)	12100	Millau, SPA	44.123	3.097	Dréno Pauline	Eyes	–
–	LPO Aveyron 14	2019.03.17	Aveyron (12)	12100	Millau, SPA	44.123	3.097	Dréno Pauline	Eyes	–
–	LPO Aveyron 3	2018.09.15	Aveyron (12)	12130	Saint-Geniez-d'Olt, le Moulin de Salelles	44.478	2.982	Talhoet Samuel	Eyes	–
–	LPO Aveyron 2	2018.11.24	Aveyron (12)	12130	Aurelle-Verlac, Rieuzens	44.538	3.016	Talhoet Samuel	Eyes	–
–	LPO Aveyron 4	2018.11.29	Aveyron (12)	12140	Le Fel, le Mas	44.657	2.515	Talhoet Samuel	Eyes	–
–	LPO Aveyron 6	2018.06.09	Aveyron (12)	12310	Bertholène, la Bouldoire	44.350	2.784	Talhoet Samuel	Eyes	–
–	LPO Aveyron 1	2018.12.05	Aveyron (12)	12360	Peux-et-Couffouleux, Couffouleux	43.768	2.876	Talhoet Samuel	Eyes	–
–	LPO Aveyron 5	2018.04.23	Aveyron (12)	12360	Peux-et-Couffouleux, le Barthas	43.779	2.887	Talhoet Samuel	Eyes	–
–	LPO Aveyron 20	2019.06.22	Aveyron (12)	12380	Pousthomy, les Combettes	43.851	2.598	Talhoet Samuel	Eyes	–
–	JM Cugnasse tubes 1 et 2	2019.08.31	Aveyron (12)	12380	Laval-Roquecezière, La Claparède	43.813	2.663	Cugnasse Jean-Marc	DNA	–
–	LPO Aveyron 11	2019.03.10	Aveyron (12)	12390	Rignac, Le Rial	44.432	2.311	Carr Charlotte	Eyes	–
–	LPO Aveyron 12	2019.01.20	Aveyron (12)	12390	Rignac, Le Rial	44.432	2.311	Carr Charlotte	Eyes	–
MNHN-ZM-2018-2246	QM007	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2018-2245	QM008	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2018-2240	QM016	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
–	QM047	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes	–
MNHN-ZM-2018-2248	QM049	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–

APPENDIX 1. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-2018-2243	QM051	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2018-2241	QM052	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2018-2247	QM053	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
–	QM056	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes	–
MNHN-ZM-2018-2244	QM057	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2018-2239	QM058	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2018-2242	QM059	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
–	QM060	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes	–
MNHN-ZM-2021-1445	QM061	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
–	QM062	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1446	QM063	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1447	QM064	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1448	QM065	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
–	QM066	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes	–
MNHN-ZM-2021-1449	QM067	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
–	QM068	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes	–
–	QM069	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes	–
MNHN-ZM-2021-1450	QM070	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1451	QM071	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1452	QM072	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
–	QM073	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes	–
MNHN-ZM-2021-1453	QM074	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1454	QM075	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1455	QM076	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
–	QM077	2017.05.01	Aveyron (12)	12420	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1456	QMA	2017.05.01	Aveyron (12)	12421	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
–	QMB	2017.05.01	Aveyron (12)	12422	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1457	QMC	2017.05.01	Aveyron (12)	12423	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1458	QMD	2017.05.01	Aveyron (12)	12424	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1459	QME	2017.05.01	Aveyron (12)	12425	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1460	QMF	2017.05.01	Aveyron (12)	12426	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1461	QMG	2017.05.01	Aveyron (12)	12427	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
MNHN-ZM-2021-1462	QMH	2017.05.01	Aveyron (12)	12428	Cantoin, Vines	44.856	2.806	Martinez Quentin	Eyes, DNA	–
–	LPO Aveyron 19	2019.05.06	Aveyron (12)	12440	Tayrac, Calmels	44.196	2.233	Vabre Annie	Eyes	–
–	LPO Aveyron 16	2019.04.30	Aveyron (12)	12460	Montézic, les Clauzades	44.710	2.627	Talhoet Samuel	Eyes	–
–	JM Cugnasse tubes 3 et 4	2019.09.06	Aveyron (12)	12480	Brousse-le-Château, Prades	44.006	2.658	Cugnasse Jean-Marc	DNA	–
–	LPO Aveyron 15	2019.04.22	Aveyron (12)	12800	Crespin, Belmont	44.170	2.293	Trille Magali	Eyes	–
–	LPO Aveyron 7	2019.01.05	Aveyron (12)	12800	Naucelle, Bonnefon	44.183	2.345	Trille Magali	Eyes	–
MNHN-ZM-2021-1482	1 Rouge	2019	Cantal (15)	15231	Talizat, Pierrefitte	45.103	3.060	Alriq Michel	Molars	–
MNHN-ZM-2021-1483	2 Rouge	2019	Cantal (15)	15231	Talizat, Pierrefitte	45.103	3.060	Alriq Michel	Molars	–
MNHN-ZM-2021-1484	3 Rouge	2019	Cantal (15)	15231	Talizat, Pierrefitte	45.103	3.060	Alriq Michel	Molars	–
MNHN-ZM-2021-1485	5 Rouge	2019	Cantal (15)	15231	Talizat, Pierrefitte	45.103	3.060	Alriq Michel	Molars	–
MNHN-ZM-2021-1486	3 Noir	2019	Cantal (15)	15231	Talizat, Vernières	45.109	3.066	Alriq Michel	Molars	–
MNHN-ZM-2021-1479	1 Noir	2019	Cantal (15)	15231	Talizat, Bolzat	45.148	3.075	Alriq Michel	Molars	–
MNHN-ZM-2021-1480	2 Noir	2019	Cantal (15)	15231	Talizat, Bolzat	45.148	3.075	Alriq Michel	Molars	–
MNHN-ZM-2021-1481	7 Rouge	2019	Cantal (15)	15231	Talizat, Bolzat	45.130	3.077	Alriq Michel	Molars	–
MNHN-ZM-MO-1938-1221	–	1938.05.09	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–

Appendix 1. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-MO-1938-1222	–	1938.04.16	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1938-1223	–	1938.04.25	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1938-1224	–	1938.07.17	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1938-1225	–	1938.05.07	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1938-1226	–	1938.07.01	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1938-1277	–	1938.07.19	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1938-1278	–	1938.07.14	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1942-197	–	1941.09.19	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1942-198	–	1939.05.31	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1942-199	–	1941.04.24	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1942-200	–	1941.04.14	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1942-202	–	1939.06.19	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1942-203	–	1939.06.15	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1942-204	–	1939.08.15	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1942-207	–	1941.04.12	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1942-208	–	1939.06.22	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1944-263	–	1942.12.05	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1949-140	–	1948.04.23	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1962-2034	–	1939.08.29	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1962-2035	–	1941.04.04	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1962-2036	–	1942.05.16	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1962-2037	–	1941.04.17	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars	–
MNHN-ZM-MO-1942-205	–	1941.03.17	Cantal (15)	15400	Le Claux	45.166	2.716	Cantuel Paul	Molars, DNA	–
MNHN-ZM-MO-1939-1139A	–	1939.01.20	Cantal (15)	15400	Cheylade	45.233	2.733	Cantuel Paul	Molars	–
MNHN-ZM-MO-1939-1139B	–	1939.01.20	Cantal (15)	15400	Cheylade	45.233	2.733	Cantuel Paul	Molars	–
MNHN-ZM-MO-1942-201	–	1939.05.19	Cantal (15)	15700	Ally	45.174	2.315	Cantuel Paul	Molars	–
MHNG 1861-021	–	1970.07.11	Cantal (15)	15800	Saint-Jacques-des-Blats	45.053	2.715	Mevlan A.	Molars	–
MNHN-ZM-2017-2728	YA0388	2014.03.17	Charente (16)	16120	Châteauneuf-sur-Charente	45.599	-0.052	Derosier Michel	Molars, DNA	KU189654
MNHN-ZM-2017-2729	YA0389	2014.03.17	Charente (16)	16120	Châteauneuf-sur-Charente	45.599	-0.052	Derosier Michel	Molars, DNA	KU189655
MNHN-ZM-2017-2730	YA0390	2014.03.17	Charente (16)	16120	Châteauneuf-sur-Charente	45.599	-0.052	Derosier Michel	Molars, DNA	KU189656
MNHN-ZM-2017-2731	YA0391	2014.03.17	Charente (16)	16120	Châteauneuf-sur-Charente	45.599	-0.052	Derosier Michel	Molars, DNA	KU189657
MNHN-ZM-2017-2732	YA0392	2014.03.17	Charente (16)	16120	Châteauneuf-sur-Charente	45.599	-0.052	Derosier Michel	Molars, DNA	KU189658
–	YA0393	2014.03.17	Charente (16)	16120	Châteauneuf-sur-Charente	45.599	-0.052	Derosier Michel	DNA	KU189659
MNHN-ZM-2017-2733	YA0394	2014.03.17	Charente (16)	16120	Châteauneuf-sur-Charente	45.599	-0.052	Derosier Michel	Molars, DNA	KU189660
MNHN-ZM-2017-2734	YA0395	2014.03.17	Charente (16)	16120	Châteauneuf-sur-Charente	45.599	-0.052	Derosier Michel	Molars, DNA	KU189661
BMNH 34.6.22.3	–	1930.08.27	Charente (16)	16700	Near Ruffec	46.016	0.200	–	Molars	–
MHNG 1256-094	–	1951.01	Charente-Maritime (17)	17000	Canal de Marans à la Rochelle (=Canal de Rompsay)	46.234	-1.074	Chanudet F.	Molars	–
MHNG 1267-09	–	–	Charente-Maritime (17)	17000	Environ de la Rochelle	46.166	-1.15	Chanudet F.	Eyes	–
MHNG 1267-091	–	–	Charente-Maritime (17)	17000	Environ de la Rochelle	46.166	-1.15	Chanudet F.	Eyes	–
MHNG 1256-093	–	1953.02.04	Charente-Maritime (17)	17138	Saint-Xandre	46.205	-1.101	Chanudet F.	Molars	–
MHNG 1256-095	–	1951.04.04	Charente-Maritime (17)	17220	Salles-sur-Mer	46.100	-1.050	Chanudet F.	Molars	–
MNHN-ZM-2017-2284	–	2015.06.19	Charente-Maritime (17)	17310	Saint-pierre-d'Oléron, Le Bois d'Anga	45.925	-1.323	Cornette Raphael	Eyes, DNA	–

Appendix 1. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MHNG 1267-083	–	1965.12.12	Charente-Maritime (17)	17540	Angliers	46.216	-0.950	Chanudet F.	Eyes	–
MHNG 1267-084	–	1967.11.26	Charente-Maritime (17)	17540	Angliers	46.216	-0.950	Chanudet F.	Eyes	–
MHNG 1267-085	–	–	Charente-Maritime (17)	17540	Angliers	46.216	-0.950	Chanudet F.	Eyes	–
MHNG 1267-086	–	–	Charente-Maritime (17)	17540	Angliers	46.216	-0.950	Chanudet F.	Eyes	–
MHNG 1267-092	–	1967.05.28	Charente-Maritime (17)	17540	Angliers	46.216	-0.950	Chanudet F.	Molars	–
MHNG 1267-093	–	1971.07.05	Charente-Maritime (17)	17540	Angliers	46.216	-0.950	Chanudet F.	Molars	–
MHNG 1267-094	–	1969.05.18	Charente-Maritime (17)	17540	Angliers	46.216	-0.950	Chanudet F.	Molars	–
MNHN-ZM-MO-1992-1407A	–	1992.01.	Charente-Maritime (17)	17610	Dompierre sur Charente	45.702	-0.490	Denys Christiane	Eyes	–
MNHN-ZM-MO-1992-1407B	–	1992.01.	Charente-Maritime (17)	17610	Dompierre-sur-Charente	45.702	-0.490	Denys Christiane	Eyes	–
MNHN-ZM-MO-1992-1407C	–	1992.01.	Charente-Maritime (17)	17610	Dompierre-sur-Charente	45.702	-0.490	Denys Christiane	Eyes	–
MNHN-ZM-MO-2001-487	–	–	Charente-Maritime (17)	17610	Dompierre-sur-Charente	45.702	-0.490	Denys Christiane	Eyes, DNA	KU189585
MNHN-ZM-MO-2001-488	–	–	Charente-Maritime (17)	17610	Dompierre-sur-Charente	45.702	-0.490	Denys Christiane	Eyes, DNA	KU189586
MNHN-ZM-MO-1994-1116	–	1992.11.	Charente-Maritime (17)	17610	Dompierre-sur-Charente, Beauvais	45.702	-0.490	Rabache Etienne	Eyes	–
MNHN-ZM-MO-1994-1117	–	1992.11.	Charente-Maritime (17)	17610	Dompierre-sur-Charente, Beauvais	45.702	-0.490	Rabache Etienne	Eyes	–
MNHN-ZM-MO-1994-1118	–	1992.11.	Charente-Maritime (17)	17610	Dompierre-sur-Charente, Beauvais	45.702	-0.490	Rabache Etienne	Eyes	–
MNHN-ZM-2021-1368	VN1866	2018.07.23	Charente-Maritime (17)	17800	Salignac-sur-Charente	45.672	-0.421	Houssin Céline	Eyes, DNA	–
MNHN-ZM-2017-2735	YA0407	–	Charente-Maritime (17)	17810	Nieul-les-Saintes	45.760	-0.731	Derosier Michel	Molars, DNA	KU189672
–	YA0408	–	Charente-Maritime (17)	17810	Nieul-les-Saintes	45.760	-0.731	Derosier Michel	Molars, DNA	KU189673
–	YA0409	–	Charente-Maritime (17)	17810	Nieul-les-Saintes	45.760	-0.731	Derosier Michel	Molars, DNA	KU189674
MNHN-ZM-2017-2736	YA0410	–	Charente-Maritime (17)	17810	Nieul-les-Saintes	45.760	-0.731	Derosier Michel	Molars, DNA	KU189675
MNHN-ZM-2017-2737	YA0411	–	Charente-Maritime (17)	17810	Nieul-les-Saintes	45.760	-0.731	Derosier Michel	Molars, DNA	–
Museum Bourges 2018.11.3	–	2000.10.02	Cher (18)	18200	Saint-Amand-Montrond	46.716	2.516	–	DNA	–
Museum Bourges 2001.11.1	–	1905.05.27	Cher (18)	–	unknown	unknown	unknown	–	Molars, DNA	–
Museum Bourges 2001.11.2	–	1905.05.27	Cher (18)	–	unknown	unknown	unknown	–	Molars, DNA	–
Museum Aix en Provence	VN1856	2018.03.28	Corrèze (19)	19300	Rosiers-d'Égletons	45.375	2.059	Vialle Nicolas	Eyes, DNA	–

APPENDIX 1. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
–	YA0497	2016.03.15	Creuse (23)	23430	Saint-Goussaud	46.041	1.578	Morichon David	DNA	–
MHNA n.2010.711	–	–	Deux-Sèvres (79)	79100	Thouars	46.966	-0.216	–	Eyes	–
MHNA n.2010.712	–	–	Deux-Sèvres (79)	79100	Thouars	46.966	-0.216	–	Eyes	–
MNHN-ZM-2017-2741	YA0479	2015.02.18	Dordogne (24)	24530	Quinsac	45.430	0.706	Laclamette Jean-Luc	Molars	–
MNHN-ZM-AC-1996-537	–	1996.03.10	Dordogne (24)	24620	Eyzies-de-Tayac	44.933	1.033	–	Molars	–
MNHN-ZM-2016-475	YA0425	2014.04.17	Dordogne (24)	24800	Nantheuil	45.413	0.944	Laclamette Jean-Luc	Molars, DNA	KU189690
MNHN-ZM-2017-2738	YA0426	2014.04.17	Dordogne (24)	24800	Nantheuil	45.413	0.944	Laclamette Jean-Luc	Molars, DNA	KU189691
MNHN-ZM-2017-2739	YA0427	2014.04.18	Dordogne (24)	24800	Nantheuil	45.413	0.944	Laclamette Jean-Luc	Molars, DNA	KU189692
MNHN-ZM-2017-2740	YA0428	2014.04.18	Dordogne (24)	24800	Nantheuil	45.413	0.944	Laclamette Jean-Luc	Molars, DNA	KU189693
MNHN-ZM-AC-1996-536	–	1996.03.10	Dordogne (24)	25240	Mouthe	44.933	1.017	–	Molars	–
MNHN-ZM-AC-1985-27	–	–	Dordogne (24)	–	unknown	unknown	unknown	–	Molars	–
–	Emilie Bergues 1	2019.08.21	Gers (32)	32170	Monpardiac, lac	43.460	0.236	Bergues Emilie	Eyes	–
–	Emilie Bergues 2	2019.04.07	Gers (32)	32190	Caillavet, église Saint-Orens de Laas	43.701	0.327	Bergues Emilie	Eyes	–
BMNH 6.4.1.28	–	1900.02.14	Gers (32)	–	Forêt de Bouconne	43.597	1.120	–	Molars	–
BMNH 6.4.1.29	–	1900.02.26	Gers (32)	–	Forêt de Bouconne	43.597	1.120	–	Molars	–
BMNH 6.4.1.31	–	1900.02.27	Gers (32)	–	Forêt de Bouconne	43.597	1.120	–	Molars	–
MNHN-ZM-2017-2265	–	2016.05.01	Gironde (33)	33000	Bordeaux, lac	44.890	-0.574	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2263	–	2016.05.10	Gironde (33)	33000	Bordeaux	44.837	-0.579	Laclamette Jean-Luc	Eyes, DNA	–
Museum Nancy 2013.0.834	–	–	Gironde (33)	33000	Bordeaux	44.837	-0.579	–	DNA	–
Museum Nancy 2016.0.834	–	–	Gironde (33)	33000	Bordeaux	44.837	-0.579	–	Eyes	–
MNHN-ZM-MO-1962-2050	–	–	Gironde (33)	33000	Bordeaux	44.837	-0.579	Cantuel Paul	Molars	–
MNHN-ZM-2017-2744	YA0125	2013.05.22	Gironde (33)	33010	Arcins	44.798	-0.514	Laclamette Jean-Luc	Molars, DNA	KU189600
MNHN-ZM-2017-2752	YA0126	2013.06.05	Gironde (33)	33056	Blanquefort	44.900	-0.643	Laclamette Jean-Luc	Molars, DNA	KU189601
MNHN-ZM-2017-2753	YA0127	2013.06.05	Gironde (33)	33056	Blanquefort	44.900	-0.643	Laclamette Jean-Luc	Molars, DNA	KU189602
MNHN-ZM-2017-2754	YA0128	2013.06.05	Gironde (33)	33056	Blanquefort	44.900	-0.643	Laclamette Jean-Luc	Molars, DNA	KU189603
MNHN-ZM-2017-2755	YA0129	2013.06.05	Gironde (33)	33056	Blanquefort	44.900	-0.643	Laclamette Jean-Luc	Molars, DNA	KU189604
–	YA0477	2014.12.03	Gironde (33)	33056	Blanquefort	44.900	-0.643	Laclamette Jean-Luc	Eyes	–
–	YA0478	2014.12.03	Gironde (33)	33056	Blanquefort	44.900	-0.643	Laclamette Jean-Luc	Eyes	–
–	YA0457	2014.11.12	Gironde (33)	33115	Pyla-sur-Mer	44.572	-1.222	Laclamette Jean-Luc	DNA	–
–	YA0458	2014.11.12	Gironde (33)	33115	Pyla-sur-Mer	44.572	-1.222	Laclamette Jean-Luc	DNA	–
–	YA0485	2015.03.10	Gironde (33)	33121	Carcans	45.079	-1.043	Laclamette Jean-Luc	DNA	–
MNHN-ZM-2017-2759	YA0486	2015.03.10	Gironde (33)	33121	Carcans	45.079	-1.043	Laclamette Jean-Luc	Molars, DNA	–
–	YA0490	2015.02.19	Gironde (33)	33121	Carcans	45.079	-1.043	Laclamette Jean-Luc	DNA	–
–	YA0491	2015.02.19	Gironde (33)	33121	Carcans	45.079	-1.043	Laclamette Jean-Luc	Eyes	–
–	YA0492	2015.02.19	Gironde (33)	33121	Carcans	45.079	-1.043	Laclamette Jean-Luc	Eyes	–
MNHN-ZM-2017-2760	YA0493	2015.02.19	Gironde (33)	33121	Carcans	45.079	-1.043	Laclamette Jean-Luc	Molars	–
–	YA0494	2015.02.19	Gironde (33)	33121	Carcans	45.079	-1.043	Laclamette Jean-Luc	Eyes	–
–	YA0495	2015.02.19	Gironde (33)	33121	Carcans	45.079	-1.043	Laclamette Jean-Luc	Eyes	–
–	YA0449	2014.11.08	Gironde (33)	33127	Martignas-sur-Jalles	44.841	-0.774	Laclamette Jean-Luc	DNA	–
–	YA0416	2013.09.19	Gironde (33)	33127	Martignas-sur-Jalles	44.841	-0.774	Laclamette Jean-Luc	DNA	KU189681
–	YA0487	2014.10.14	Gironde (33)	33160	Saint-Aubin-de-Médoc	44.913	-0.724	Laclamette Jean-Luc	DNA	–
–	YA0132	2013.05.16	Gironde (33)	33207	Izon	44.914	-0.427	Laclamette Jean-Luc	Molars, DNA	KU189607
MNHN-ZM-2017-2768	YA0133	2013.05.16	Gironde (33)	33207	Izon	44.914	-0.427	Laclamette Jean-Luc	Molars, DNA	KU189608
–	YA0134	2013.05.16	Gironde (33)	33207	Izon	44.914	-0.427	Laclamette Jean-Luc	Molars, DNA	KU189609
MNHN-ZM-2017-2769	YA0134.1	2013.05.16	Gironde (33)	33207	Izon	44.914	-0.427	Laclamette Jean-Luc	Molars	–
MNHN-ZM-2017-2770	YA0134.2	2013.05.16	Gironde (33)	33207	Izon	44.914	-0.427	Laclamette Jean-Luc	DNA	–
MNHN-ZM-2017-2771	YA0135	2013.05.16	Gironde (33)	33207	Izon	44.914	-0.427	Laclamette Jean-Luc	Molars, DNA	KU189610
MNHN-ZM-2017-2772	YA0136	2013.05.16	Gironde (33)	33207	Izon	44.914	-0.427	Laclamette Jean-Luc	Molars, DNA	KU189611

Appendix 1. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MHNG 1476-05	–	1967..	Gironde (33)	33210	Roaillan	44.500	-0.283	Chanudet F.	Eyes	–
MHNG 1267-077	–	1968..	Gironde (33)	33210	Roaillan	44.500	-0.283	Chanudet F.	Molars	–
MHNG 1267-079	–	1968..	Gironde (33)	33210	Roaillan	44.500	-0.283	Chanudet F.	Molars	–
MHNG 1267-096	–	1966..	Gironde (33)	33210	Roaillan	44.500	-0.283	Chanudet F.	Molars	–
MHNG 1267-097	–	1966..	Gironde (33)	33210	Roaillan	44.500	-0.283	Chanudet F.	Molars	–
MHNG 1256-098	–	1953.08.22	Gironde (33)	33210	Sauternes	44.533	-0.366	Chanudet F.	Molars	–
MHNG 1267-08	–	1962.09.15	Gironde (33)	33210	Sauternes	44.533	-0.366	Chanudet F.	Molars	–
MHNG 1267-081	–	1964.04.02	Gironde (33)	33210	Sauternes - Dhnijzan	44.533	-0.366	Chanudet F.	Molars	–
–	YA0476	2015.03.29	Gironde (33)	33220	Port-Sainte-Foy-et-Ponchapt	44.844	0.211	Laclamette Jean-Luc	DNA	–
–	YA0467	2015.03.09	Gironde (33)	33230	Guitres	45.041	-0.185	Laclamette Jean-Luc	DNA	–
MNHN-ZM-2016-474	YA0424	2013.10.18	Gironde (33)	33240	La Lande-de-Fronsac	44.980	-0.38	Laclamette Jean-Luc	Molars, DNA	KU189689
MNHN-ZM-2017-2784	YA0445	2014.12.18	Gironde (33)	33240	Peujard	45.047	-0.429	Laclamette Jean-Luc	Molars, DNA	–
MNHN-ZM-2017-2785	YA0446	2014.12.18	Gironde (33)	33240	Peujard	45.047	-0.429	Laclamette Jean-Luc	Molars, DNA	–
MNHN-ZM-2017-2786	YA0447	2014.12.18	Gironde (33)	33240	Peujard	45.047	-0.429	Laclamette Jean-Luc	Molars	–
MNHN-ZM-2017-2787	YA0462	2014.12.12	Gironde (33)	33240	Peujard	45.047	-0.429	Laclamette Jean-Luc	Molars	–
MNHN-ZM-2017-2788	YA0463	2014.12.12	Gironde (33)	33240	Peujard	45.047	-0.429	Laclamette Jean-Luc	Molars	–
MNHN-ZM-2021-1476	YA0217	2013.08.28	Gironde (33)	33260	La Teste-de-Buch	44.631	-1.148	Laclamette Jean-Luc	Molars, DNA	KU189618
–	YA0448	2015.02.07	Gironde (33)	33270	Bouliac	44.815	-0.500	Laclamette Jean-Luc	Eyes	–
MNHN-ZM-2017-2254	–	2016.10.24	Gironde (33)	33290	Izon, Les chapeaux ronds	44.916	-0.366	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2773	YA0417	2013.10.08	Gironde (33)	33290	Le Pian-Médoc	44.955	-0.668	Laclamette Jean-Luc	Molars, DNA	KU189682
MNHN-ZM-2017-2774	YA0219	2013.09.02	Gironde (33)	33320	Le Taillan	44.904	-0.669	Laclamette Jean-Luc	Molars, DNA	KU189620
MNHN-ZM-2017-2795	YA0440	2014.04.15	Gironde (33)	33330	Saint-Émilion	44.893	-0.154	Laclamette Jean-Luc	DNA	KU189702
MNHN-ZM-2017-2763	YA0434	2014.03.02	Gironde (33)	33340	Gaillan-en-Médoc	45.325	-0.953	Laclamette Jean-Luc	Molars, DNA	KU189696
MNHN-ZM-2017-2255	–	2016.04.15	Gironde (33)	33360	Parempuyre	44.950	-0.583	Laclamette Jean-Luc	Eyes, DNA	–
–	YA0131	2013.05.15	Gironde (33)	33363	Sadirac	44.746	-0.433	Laclamette Jean-Luc	Molars, DNA	KU189606
MNHN-ZM-2017-2794	YA0439	2014.08.29	Gironde (33)	33376	Saint-Aubin-de-Médoc	44.913	-0.724	Laclamette Jean-Luc	Molars, DNA	KU189701
BMNH 19.7.7.1765	–	1882.08.24	Gironde (33)	33410	Cadillac	44.633	-0.316	–	Molars	–
BMNH 19.7.7.1967	–	1882.08.24	Gironde (33)	33410	Cadillac	44.633	-0.316	–	Molars	–
MNHN-ZM-2017-2792	YA0122	2013.05.27	Gironde (33)	33433	Saint-Loubes	44.916	-0.427	Laclamette Jean-Luc	Molars, DNA	KU189597
–	YA0123	2013.05.27	Gironde (33)	33433	Saint-Loubes	44.916	-0.427	Laclamette Jean-Luc	Molars, DNA	KU189598
MNHN-ZM-2017-2793	YA0124	2013.05.27	Gironde (33)	33433	Saint-Loubes	44.916	-0.427	Laclamette Jean-Luc	Molars, DNA	KU189599
MNHN-ZM-2017-2268	–	2016.04.27	Gironde (33)	33440	Ambarès-et-Lagrave	44.916	-0.483	Laclamette Jean-Luc	Eyes, DNA	–
–	YA0130	2013.05.01	Gironde (33)	33440	Ambares-et-Lagrave	44.925	-0.484	Laclamette Jean-Luc	Molars, DNA	KU189605
MNHN-ZM-2017-2742	YA0453	2015.01.25	Gironde (33)	33440	Ambares-et-Lagrave	44.925	-0.484	Laclamette Jean-Luc	Molars	–
MNHN-ZM-2017-2743	YA0454	2015.01.25	Gironde (33)	33440	Ambares-et-Lagrave	44.925	-0.484	Laclamette Jean-Luc	Molars	–
MNHN-ZM-2017-2253	–	2016.05.31	Gironde (33)	33450	La Lande-de-Fronsac	44.983	-0.383	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2266	–	2016.04.25	Gironde (33)	33450	Saint-Sulpice-et-Cameyrac	44.910	-0.389	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2271	–	2016.05.24	Gironde (33)	33450	Saint-Sulpice-et-Cameyrac	44.910	-0.389	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2272	–	2016.04.07	Gironde (33)	33450	Saint-Sulpice-et-Cameyrac	44.910	-0.389	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2267	–	2016.04.23	Gironde (33)	33460	Labarde	45.016	-0.633	Laclamette Jean-Luc	Eyes, DNA	–
–	YA0488	2015.08.10	Gironde (33)	33460	La Barde, Giscours	45.015	-0.638	Laclamette Jean-Luc	DNA	–
MNHN-ZM-2017-2758	YA0218	2013.09.02	Gironde (33)	33460	Cantenac	45.029	-0.655	Laclamette Jean-Luc	Molars, DNA	KU189619
–	YA0466	2014.10.31	Gironde (33)	33460	Lamarque	45.096	-0.716	Laclamette Jean-Luc	DNA	–
–	YA0468	2014.12.04	Gironde (33)	33460	Lamarque	45.096	-0.716	Laclamette Jean-Luc	DNA	–
–	YA0469	2014.12.04	Gironde (33)	33460	Lamarque	45.096	-0.716	Laclamette Jean-Luc	Eyes	–
–	YA0418	2013.10.09	Gironde (33)	33460	Avensan	45.034	-0.757	Laclamette Jean-Luc	Molars, DNA	KU189683
–	YA0419	2013.10.09	Gironde (33)	33460	Avensan	45.034	-0.757	Laclamette Jean-Luc	Molars, DNA	KU189684
MNHN-ZM-2017-2746	YA0419A	2013.10.09	Gironde (33)	33460	Avensan	45.034	-0.757	Laclamette Jean-Luc	Molars	–
MNHN-ZM-2017-2747	YA0419B	2013.10.09	Gironde (33)	33460	Avensan	45.034	-0.757	Laclamette Jean-Luc	Molars	–

APPENDIX 1. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-2017-2748	YA0420	2013.10.09	Gironde (33)	33460	Avensan	45.034	-0.757	Laclamette Jean-Luc	Molars, DNA	KU189685
MNHN-ZM-2017-2749	YA0421	2013.10.09	Gironde (33)	33460	Avensan	45.034	-0.757	Laclamette Jean-Luc	Molars, DNA	KU189686
MNHN-ZM-2017-2750	YA0422	2013.10.09	Gironde (33)	33460	Avensan	45.034	-0.757	Laclamette Jean-Luc	Molars, DNA	KU189687
MNHN-ZM-2017-2751	YA0423	2013.10.12	Gironde (33)	33460	Avensan	45.034	-0.757	Laclamette Jean-Luc	Molars, DNA	KU189688
–	YA0471	2015.02.19	Gironde (33)	33460	Avensan	45.034	-0.757	Laclamette Jean-Luc	DNA	–
–	YA0472	2015.02.19	Gironde (33)	33460	Avensan	45.034	-0.757	Laclamette Jean-Luc	DNA	–
–	YA0473	2015.04.12	Gironde (33)	33470	Gujan-Mestras	44.636	-1.066	Laclamette Jean-Luc	DNA	–
MNHN-ZM-2017-2764	YA0474	2015.04.12	Gironde (33)	33470	Gujan-Mestras	44.636	-1.066	Laclamette Jean-Luc	Molars, DNA	–
MNHN-ZM-2017-2765	YA0480	2015.03.29	Gironde (33)	33470	Gujan-Mestras	44.636	-1.066	Laclamette Jean-Luc	Molars	–
MNHN-ZM-2017-2766	YA0481	2015.04.04	Gironde (33)	33470	Gujan-Mestras	44.636	-1.066	Laclamette Jean-Luc	Molars	–
MNHN-ZM-2017-2767	YA0482	2015.04.04	Gironde (33)	33470	Gujan-Mestras	44.636	-1.066	Laclamette Jean-Luc	Molars	–
–	YA0483	2015.04.04	Gironde (33)	33470	Gujan-Mestras	44.636	-1.066	Laclamette Jean-Luc	Eyes	–
MNHN-ZM-2017-2745	YA0214	2013.08.26	Gironde (33)	33480	Avensan	45.034	-0.757	Laclamette Jean-Luc	Molars, DNA	KU189615
MNHN-ZM-2017-2756	YA0464	2015.01.05	Gironde (33)	33520	Bruges	44.883	-0.611	Laclamette Jean-Luc	Molars, DNA	–
MNHN-ZM-2017-2757	YA0465	2015.01.05	Gironde (33)	33520	Bruges	44.883	-0.611	Laclamette Jean-Luc	Molars, DNA	–
–	YA0484	2015.01.03	Gironde (33)	33520	Bruges	44.883	-0.611	Laclamette Jean-Luc	Eyes	–
MNHN-ZM-MO-1913-232	–	1912.12.11	Gironde (33)	33570	Puisseguin	44.933	-0.066	Lassagne Jean	Eyes, DNA	–
–	YA0475	2014.12.31	Gironde (33)	33600	Pessac	44.806	-0.631	Laclamette Jean-Luc	DNA	–
MNHN-ZM-2017-2261	–	2016.04.23	Gironde (33)	33610	Cestas	44.733	-0.683	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2262	–	2016.04.23	Gironde (33)	33610	Cestas	44.733	-0.683	Laclamette Jean-Luc	Eyes, DNA	–
–	YA0460	2014.11.15	Gironde (33)	33620	Marcenais	45.058	-0.336	Laclamette Jean-Luc	DNA	–
–	YA0461	2014.11.15	Gironde (33)	33620	Marcenais	45.058	-0.336	Laclamette Jean-Luc	DNA	–
MNHN-ZM-2017-2780	YA0435	2014.03.24	Gironde (33)	33700	Mérignac	44.843	-0.644	Laclamette Jean-Luc	Molars, DNA	KU189697
MNHN-ZM-2017-2781	YA0436	2014.03.24	Gironde (33)	33700	Mérignac	44.843	-0.644	Laclamette Jean-Luc	Molars, DNA	KU189698
MNHN-ZM-2017-2782	YA0437	2014.03.24	Gironde (33)	33700	Mérignac	44.843	-0.644	Laclamette Jean-Luc	Molars, DNA	KU189699
MNHN-ZM-2017-2783	YA0438	2014.03.24	Gironde (33)	33700	Mérignac	44.843	-0.644	Laclamette Jean-Luc	Molars, DNA	KU189700
–	YA0415	2013.09.12	Gironde (33)	33720	Cerons	44.632	-0.335	Laclamette Jean-Luc	Molars, DNA	KU189680
MNHN-ZM-2017-2761	YA0215	2013.08.29	Gironde (33)	33720	Cerons	44.631	-0.337	Laclamette Jean-Luc	Molars, DNA	KU189616
MNHN-ZM-2017-2762	YA0216	2013.08.29	Gironde (33)	33720	Cerons	44.631	-0.337	Laclamette Jean-Luc	Molars, DNA	KU189617
MNHN-ZM-2017-2789	YA0211	2013.08.26	Gironde (33)	33720	Podensac	44.650	-0.354	Laclamette Jean-Luc	Molars, DNA	KU189612
MNHN-ZM-2017-2790	YA0212	2013.08.26	Gironde (33)	33720	Podensac	44.650	-0.354	Laclamette Jean-Luc	Molars, DNA	KU189613
MNHN-ZM-2017-2791	YA0213	2013.08.26	Gironde (33)	33720	Podensac	44.650	-0.354	Laclamette Jean-Luc	Molars, DNA	KU189614
MNHN-ZM-2017-2252	–	2016.02.04	Gironde (33)	33720	Landiras	44.566	-0.416	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2257	–	2016.02.08	Gironde (33)	33720	Landiras	44.566	-0.416	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2258	–	2016.02.08	Gironde (33)	33720	Landiras	44.566	-0.416	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2259	–	2016.02.08	Gironde (33)	33720	Landiras	44.566	-0.416	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2260	–	2016.02.08	Gironde (33)	33720	Landiras	44.566	-0.416	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2273	–	2016.02.08	Gironde (33)	33720	Landiras	44.566	-0.416	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2274	–	2016.02.08	Gironde (33)	33720	Landiras	44.566	-0.416	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2275	–	2016.02.08	Gironde (33)	33720	Landiras	44.566	-0.416	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2276	–	2016.02.08	Gironde (33)	33720	Landiras	44.566	-0.416	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2256	–	2016.05.03	Gironde (33)	33720	Cénac	44.779	-0.460	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2269	–	2016.05.17	Gironde (33)	33760	Saint-Genis-du-Bois	44.700	-0.183	Laclamette Jean-Luc	Eyes, DNA	–
MNHN-ZM-2017-2270	–	2016.02.29	Gironde (33)	33870	Vayres	44.900	-0.316	Laclamette Jean-Luc	Eyes, DNA	–
–	YA0470	2014.10.31	Gironde (33)	33880	Saint-Caprais-de-Bordeaux	44.751	-0.435	Laclamette Jean-Luc	Eyes	–
–	YA0452	2015.04.03	Gironde (33)	33880	Baurech	44.726	-0.438	Laclamette Jean-Luc	Eyes	–
MNHN-ZM-2017-2264	–	2016.04.07	Gironde (33)	33910	Sablons	45.033	-0.183	Laclamette Jean-Luc	Eyes, DNA	–
–	YA0412	2013.09.09	Gironde (33)	33910	Saint-Ciers-d'Abzac	45.031	-0.275	Laclamette Jean-Luc	DNA	KU189677
–	YA0413	2013.09.09	Gironde (33)	33910	Saint-Ciers-d'Abzac	45.031	-0.275	Laclamette Jean-Luc	Molars, DNA	KU189678
–	YA0414	2013.09.09	Gironde (33)	33910	Saint-Ciers-d'Abzac	45.031	-0.275	Laclamette Jean-Luc	Molars, DNA	KU189679

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Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
–	YA0498	–	Gironde (33)	33910	Saint-Ciers-d'Abzac	45.026	-0.285	Frémont Yannick	DNA	–
–	YA0499	–	Gironde (33)	33910	Saint-Ciers-d'Abzac	45.026	-0.285	Frémont Yannick	DNA	–
MNHN-ZM-2017-2707	–	–	Gironde (33)	33910	Saint-Ciers-d'Abzac	45.026	-0.285	Frémont Yannick	Eyes, DNA	–
MNHN-ZM-2017-2708	–	–	Gironde (33)	33910	Saint-Ciers-d'Abzac	45.026	-0.285	Frémont Yannick	Eyes, DNA	–
MNHN-ZM-2017-2709	–	–	Gironde (33)	33910	Saint-Ciers-d'Abzac	45.026	-0.285	Frémont Yannick	Eyes, DNA	–
–	YA0459	2015.04.04	Gironde (33)	33930	Vandays-Montalivet	45.356	-1.059	Laclamette Jean-Luc	DNA	–
MNHN-ZM-2017-2775	YA0450	2014.11.05	Gironde (33)	33950	Lège-Cap-Ferret	44.795	-1.146	Laclamette Jean-Luc	Molars, DNA	–
MNHN-ZM-2017-2776	YA0451	2014.11.05	Gironde (33)	33950	Lège-Cap-Ferret	44.795	-1.146	Laclamette Jean-Luc	Molars, DNA	–
MNHN-ZM-2017-2777	YA0455	2014.11.05	Gironde (33)	33950	Lège-Cap-Ferret	44.795	-1.146	Laclamette Jean-Luc	Molars	–
MNHN-ZM-2017-2778	YA0456	2014.11.05	Gironde (33)	33950	Lège-Cap-Ferret	44.795	-1.146	Laclamette Jean-Luc	Molars	–
MNHN-ZM-2017-2779	YA0489	2015.11.05	Gironde (33)	33950	Lège-Cap-Ferret	44.795	-1.146	Laclamette Jean-Luc	Molars	–
MNHN-ZM-2017-2277	–	–	Gironde (33)	–	unknown	unknown	unknown	Laclamette Jean-Luc	Eyes	–
MNHN-ZM-2017-2278	–	–	Gironde (33)	–	unknown	unknown	unknown	Laclamette Jean-Luc	Eyes	–
MNHN-ZM-2017-2279	–	–	Gironde (33)	–	unknown	unknown	unknown	Laclamette Jean-Luc	Eyes	–
MNHN-ZM-2017-2280	–	–	Gironde (33)	–	unknown	unknown	unknown	Laclamette Jean-Luc	Eyes	–
MNHN-ZM-2017-2281	–	–	Gironde (33)	–	unknown	unknown	unknown	Laclamette Jean-Luc	Eyes	–
MNHN-ZM-2017-2282	–	–	Gironde (33)	–	unknown	unknown	unknown	Laclamette Jean-Luc	Eyes	–
MVZ:Mamm:34255	–	1924.05.30	Haute-Garonne (31)	31000	Toulouse	43.600	1.433	–	Skull	–
MHNG 1476-045	–	1960.08.20	Haute-Garonne (31)	31110	Garin	42.816	0.516	Chanudet F.	Molars	–
BMNH 6.4.1.21	–	1905.03.20	Haute-Garonne (31)	31110	Luchon	42.783	0.600	–	Molars	–
BMNH 6.4.1.23	–	1900.01.20	Haute-Garonne (31)	31110	Luchon	42.783	0.600	–	Molars	–
MNHN-ZM-2013-153	YA0006	2012.04.11	Haute-Garonne (31)	31230	Pitoulet	43.343	0.900	Laffont Eric	Eyes	–
–	YA0431	2014.09.01	Haute-Garonne (31)	31270	Cugnaux	43.536	1.334	Laffon Eric	DNA	KU189695
MNHN-ZM-2013-154	YA0007	2012.04.11	Haute-Garonne (31)	31320	Mervilla	43.507	1.476	Laffont Eric	Eyes	–
–	YA0430	2014.09.01	Haute-Garonne (31)	31400	Toulouse	43.560	1.439	Laffon Eric	Molars	–
NMNH 152324	183	1900.03.10	Haute-Garonne (31)	31490	Leguevin	43.599	1.25	Robert A.	Molars	–
MNHN-ZM-2013-152	YA0005	2012.04.01	Haute-Garonne (31)	31600	Muret-Lherm, airport	43.449	1.262	Laffont Eric	Eyes	–
–	YA0429	2014.09.01	Haute-Garonne (31)	31670	Labège	43.530	1.530	Laffon Eric	DNA	KU189694
MNHN-ZM-2021-1369	VN1865	2018.08.09	Haute-Garonne (31)	31800	Venerque	43.434	1.444	Delapré Arnaud	Eyes, DNA	–
MNHN-ZM-2021-1370	VN1885	aout 2019	Haute-Garonne (31)	31810	Venerque	43.426	1.453	Delapré Arnaud	Eyes	–
MNHN-ZM-2021-1371	VN1886	aout 2019	Haute-Garonne (31)	31810	Venerque	43.426	1.453	Delapré Arnaud	Eyes	–
NMNH 152325	131	1900.02.11	Haute-Garonne (31)	–	Forêt de Bouconne	43.641	1.221	Robert A.	Molars	–
NMNH 152326	169	1900.03.04	Haute-Garonne (31)	–	Forêt de Bouconne	43.641	1.221	Robert A.	Molars	–
NMNH 152327	172	1900.03.05	Haute-Garonne (31)	–	Forêt de Bouconne	43.641	1.221	Robert A.	Molars	–
BMNH 6.4.1.24	–	1900.01.13	Haute-Garonne (31)	–	Caterille (= Caserille)	unknown	unknown	–	Molars	–
BMNH 6.4.1.25	–	1900.01.24	Haute-Garonne (31)	–	Caterille (= Caserille)	unknown	unknown	–	Molars	–
BMNH 6.4.1.26	–	1900.01.24	Haute-Garonne (31)	–	Caterille (= Caserille)	unknown	unknown	–	Molars	–
BMNH 6.4.1.27	–	1900.01.30	Haute-Garonne (31)	–	Caterille (= Caserille)	unknown	unknown	–	Molars	–
BMNH 70.80	–	1970..	Haute-Pyrénées (65)	–	unknown	unknown	unknown	–	Molars	–
NMNH 172103	7176	1906.09.16	Hautes-Pyrénées (65)	65120	Barèges	42.897	0.064	Miller G. S.	Molars	–
BMNH 8.8.4.130	–	1906.09.19	Hautes-Pyrénées (65)	65120	Barèges	42.897	0.064	–	Molars	–
BMNH 8.8.4.131	–	1906.09.15	Hautes-Pyrénées (65)	65120	Barèges	42.897	0.064	–	Molars	–
BMNH 8.8.4.132	–	1906.09.18	Hautes-Pyrénées (65)	65120	Barèges	42.897	0.064	–	Molars	–
MNHN-ZM-MO-1983-663	–	1936.07.15	Hautes-Pyrénées (65)	–	Gave d'Ossau (1450 m)	43.194	-0.607	Jordan Karl	DNA	KU189581

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Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MHNN.Z.045118	–	1924.11.10	Haute-Vienne (87)	87190	Magnac-Laval	46.216	1.166	–	Eyes	–
MHNN.Z.045119	–	1945.03.23	Haute-Vienne (87)	87190	Magnac-Laval	46.216	1.166	–	Eyes	–
MHNN.Z.045120	–	1934.04.20	Haute-Vienne (87)	87190	Magnac-Laval	46.216	1.166	–	Eyes	–
MHNN.Z.045121	–	1934.05.28	Haute-Vienne (87)	87190	Magnac-Laval	46.216	1.166	–	Eyes	–
MHNN.Z.045122	–	1954.06.12	Haute-Vienne (87)	87190	Magnac-Laval	46.216	1.166	–	Eyes	–
MHNN.Z.045123	–	1945.03.19	Haute-Vienne (87)	87190	Magnac-Laval	46.216	1.166	–	Eyes	–
MHNN.Z.045124	–	1937.09.15	Haute-Vienne (87)	87190	Magnac-Laval	46.216	1.166	–	Eyes	–
MHNN.Z.045125	–	1945.03.25	Haute-Vienne (87)	87190	Magnac-Laval	46.216	1.166	–	Eyes	–
MHNN.Z.045163	–	1925.03.21	Haute-Vienne (87)	87210	Le Dorat	46.216	1.083	–	Eyes	–
MNHN-ZM-2017-2797	YA0444	2015.04.01	Haute-Vienne (87)	87520	Veyrac, Glâne	45.933	1.088	Petit Daniel	Molars, DNA	–
MNHN-ZM-2017-2796	YA0443	2015.05.01	Haute-Vienne (87)	87520	Veyrac, Estivaux	45.905	1.092	Petit Daniel	Molars, DNA	–
MNHN-ZM-2017-2251	–	2016.05.02	Haute-Vienne (87)	87520	Les Cosjanots, Veyrac	45.919	1.108	Petit Daniel	Eyes, DNA	–
MNHN-ZM-2017-2250	–	2015.10.05	Haute-Vienne (87)	87520	Nieul	45.926	1.174	Petit Daniel	Eyes, DNA	–
–	VN1918	2017.10.07	Hérault (34)	34610	Rosis, Douch	43.610	2.973	Fabre Pierre-Henri	Eyes	–
–	VN1919	2017.10.07	Hérault (34)	34610	Rosis, Douch	43.610	2.973	Fabre Pierre-Henri	Eyes	–
MNHN-ZM-2017-2304	VN1822	1905.07.08	Indre (36)	36300	Rosnay	46.732	1.190	Boussès Patrick	DNA	–
MNHN-ZM-MO-1984-783	–	–	Indre-et-Loire (37)	37250	Veigné	47.288	0.738	–	Eyes	–
–	Saint Gor 1	–	Landes (40)	40120	Saint-Gor	44.050	-0.233	Riols Christian (LPO Aude)	Molars	–
–	Saint Gor 2	–	Landes (40)	40120	Saint-Gor	44.050	-0.233	Riols Christian (LPO Aude)	Molars	–
BMNH 6.4.1.32	–	1900.03.18	Landes (40)	40210	Solferino	44.150	-0.900	–	Molars	–
BMNH 6.4.1.33	–	1900.03.20	Landes (40)	40210	Solferino	44.150	-0.900	–	Molars	–
–	–	2019.04.25	Landes (40)	40273	Saint-Martin-de-Seignanx	43.543	-1.431	Étude GREGE - Christine Fournier-Chambrillon	DNA	–
MNHN-ZM-2018-2249	VN1855	2018.04.01	Loire (42)	42210	Boisset-lès-Montrond (à 1 km de la Loire, rive gauche)	45.622	4.214	Chassang Pascal	Eyes, DNA	–
MHNN Z 25065	–	1951.06.28	Loire-Atlantique (44)	44160	Pontchâteau	47.433	-2.083	–	Molars, DNA	–
MHNN.Z.025066	–	–	Loire-Atlantique (44)	44330	Vallet	47.166	-1.266	–	Molars	–
–	René Rosoux 1	–	Loiret (45)	45460	Bray-Saint-Aignan	47.831	2.368	Rosoux René, Lemarchand Charles	published in Rosoux & Lemarchand (2020)	–
–	René Rosoux 2	–	Loiret (45)	45460	Bray-Saint-Aignan	47.831	2.368	Rosoux René, Lemarchand Charles	published in Rosoux & Lemarchand (2020)	–
–	René Rosoux 3	–	Loiret (45)	45460	Bray-Saint-Aignan	47.831	2.368	Rosoux René, Lemarchand Charles	published in Rosoux & Lemarchand (2020)	–
MNHN-ZM-MO-1983-662	–	1936.06.11	Lot (46)	46100	Figeac	44.600	2.033	Brosset André	DNA	–
–	LPO Lot 1	2012..	Lot (46)	46140	Luzech, Camy	44.483	1.283	Nadal Renaud (via Riols Christian)	Molars	–
–	LPO Lot 4	2011.04.17	Lot (46)	46170	Castelnau-Montratier, chapelle de Russac	44.268	1.353	Boisguérin Jean-Christophe (via Riols Christian)	Molars	–
–	LPO Lot 5	2005.09.01	Lot (46)	46220	Prayssac	44.500	1.200	Bernadet M. (via Riols Christian)	Molars	–

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Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
–	LPO Lot 2	2011.05.31	Lot (46)	46310	Peyrilles, Teulière	44.616	1.416	Tesseydre Gilbert (via Riols Christian)	Molars	–
–	LPO Lot 3	2011.04.17	Lot (46)	46800	Saint-Pantaléon, la Jonquière	44.368	1.265	Boisguérin Jean-Christophe (via Riols Christian)	Molars	–
–	LPO Aveyron 17	2019.04.13	Lozère (48)	48031	Brion	44.755	3.070	Cristol Marie-Laure	Eyes	–
–	LPO Aveyron 8	2018.12.06	Lozère (48)	48100	Saint-Laurent-de-Muret, lou Plonas	44.617	3.184	Long Benjamain (via Talhoet Samuel)	Eyes	–
MNHN-ZM-MO-1990-970	–	–	Lozère (48)	48400	Vébron	44.240	3.578	Tranier Michel	Molars, DNA	KU189582
MNHN-ZM-MO-1998-401	–	1998.09.08	Lozère (48)	48400	Vébron, Colline du Puech, 850 m	44.240	3.578	Tranier Michel	Eyes, DNA	KU189584
MNHN-ZM-MO-2001-514	–	2001.06.21	Lozère (48)	48400	Vébron, Le Valat de Broussous	44.240	3.578	Cuisin Jacques	Eyes, DNA	KU189587
MNHN-ZM-2018-2250	VN1840	2017.10.12	Nièvre (58)	58230	Montsauche-les-Settons	47.215	4.024	Cornette Raphael	Eyes, DNA	–
MNHN-ZM-2021-1373	VN1868	2018.10.16	Nièvre (58)	58230	Gouloux, Le bridier	47.204	4.095	Cornette Raphael	Eyes, DNA	–
MNHN-ZM-2021-1374	VN1882 = TP4	2019.05.21	Nièvre (58)	58230	Montsauche-les-Settons (camping du Bridier, Les Gadreys)	47.203	4.096	Cornette Raphael Houssin Céline Delapré Arnaud	Eyes, DNA	–
MNHN-ZM-2021-137	VN1884 = TP6	2019.05.25	Nièvre (58)	58230	Montsauche-les-Settons (camping du Bridier, Les Gadreys)	47.203	4.096	Cornette Raphael Houssin Céline Delapré Arnaud	Eyes, DNA	–
MNHN-ZM-2021-1372	VN1867	2018.10.15	Nièvre (58)	58230	Gouloux, Le bridier	47.203	4.096	Cornette Raphael	Eyes, DNA	–
MNHN-ZM-2021-1375	VN1883 = TP5	2019.05.24	Nièvre (58)	58230	Montsauche-les-Settons (camping du Bridier, Les Gadreys)	47.204	4.096	Cornette Raphael Houssin Céline Delapré Arnaud	Eyes, DNA	–
BMNH 34.6.22.2	–	1930.09.10	Puy-de-Dôme (63)	63150	La Bourboule	45.583	2.750	–	Molars	–
MNHN-ZM-2016-473 PARATYPE	YA0386	2014.04.13	Puy-de-Dôme (63)	63190	Lezoux	45.828	3.380	Georgeon Jean-Michel	Molars, DNA	KU189653
MNHN-ZM-2021-1378	VN1872 = TMLH3	2018.04.01	Puy-de-Dôme (63)	63210	Olby, Le Monteillet, Le Moulin	45.753	2.827	Bachelard Louis (via Lemarchand Charles)	Eyes	–
MNHN-ZM-2021-1377	VN1871 = TMLH2	2018.04.02	Puy-de-Dôme (63)	63210	Olby, Le Monteillet, Ganatou	45.752	2.830	Bachelard Louis (via Lemarchand Charles)	Eyes	–
–	VN1870 = TMLH1	2018.03.30	Puy-de-Dôme (63)	63210	Olby, Le Monteillet, Les Varennes	45.754	2.835	Bachelard Louis (via Lemarchand Charles)	Eyes	–
MNHN-ZM-2021-1380	VN1873 = TMLH4	2018.05.31	Puy-de-Dôme (63)	63230	Pulvérières, Blanchet	45.906	2.909	Robert Alain (via Lemarchand Charles)	Eyes	–
MNHN-ZM-2021-1381	VN1874 = TMLH5	2018.05.31	Puy-de-Dôme (63)	63230	Pulvérières, Blanchet	45.906	2.909	Robert Alain (via Lemarchand Charles)	Eyes	–
MNHN-ZM-2021-1382	VN1875 = TMLH6	2018.06.01	Puy-de-Dôme (63)	63230	Pulvérières, Blanchet	45.906	2.909	Robert Alain (via Lemarchand Charles)	Eyes	–
MNHN-ZM-2021-1383	VN1876 = TMLH7	2018.06.01	Puy-de-Dôme (63)	63230	Pulvérières, Blanchet	45.906	2.909	Robert Alain (via Lemarchand Charles)	Eyes	–
MNHN-ZM-2021-1384	VN1877 = TMLH8	2018.06.01	Puy-de-Dôme (63)	63230	Pulvérières, Blanchet	45.906	2.909	Robert Alain (via Lemarchand Charles)	Eyes	–
MNHN-ZM-2021-1385	VN1878 = TMLH9	2018.06.01	Puy-de-Dôme (63)	63230	Pulvérières, Blanchet	45.906	2.909	Robert Alain (via Lemarchand Charles)	Eyes	–
MNHN-ZM-2021-1386	VN1879 = TMLH10	2018.06.01	Puy-de-Dôme (63)	63230	Pulvérières, Blanchet	45.906	2.909	Robert Alain (via Lemarchand Charles)	Eyes	–

APPENDIX 1. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-2021-1387	VN1880 = TMLH11	2018.06.01	Puy-de-Dôme (63)	63230	Pulvérières, Blanchet	45.906	2.909	Robert Alain (via Lemarchand Charles)	Eyes	–
MNHN-ZM-2017-2818	YA0381	2014.02.27	Puy-de-Dôme (63)	63230	Vulcania	45.813	2.940	Georgeon Jean-Michel	Molars, DNA	KU189648
MNHN-ZM-2017-2819	YA0382	2014.02.27	Puy-de-Dôme (63)	63230	Vulcania	45.813	2.940	Georgeon Jean-Michel	Molars, DNA	KU189649
MNHN-ZM-2017-2820	YA0383	2014.02.27	Puy-de-Dôme (63)	63230	Vulcania	45.813	2.940	Georgeon Jean-Michel	Molars, DNA	KU189650
MNHN-ZM-2017-2798	YA0340	2013.10.01	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Molars, DNA	KU189621
MNHN-ZM-2017-2799	YA0341	2013.10.02	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Molars, DNA	KU189622
MNHN-ZM-2017-2800	YA0342	2013.10.02	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Molars, DNA	KU189623
MNHN-ZM-2017-2801	YA0343	2013.10.02	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Molars, DNA	KU189624
MNHN-ZM-2017-2802	YA0344	2013.10.02	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Molars, DNA	KU189625
MNHN-ZM-2017-2803	YA0345	2013.10.03	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Molars, DNA	KU189626
MNHN-ZM-2018-2211	–	2018.03.07	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2212	–	2018.03.07	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2213	–	2018.03.07	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2214	–	2018.03.07	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2215	–	2018.03.07	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2216	–	2018.03.07	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2217	–	2018.03.07	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2218	–	2018.03.07	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2220	–	2018.03.06	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2221	–	2018.03.06	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2222	–	2018.03.06	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2223	–	2018.03.06	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2224	–	2018.03.06	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2225	–	2018.03.06	Puy-de-Dôme (63)	63270	Busseol	45.683	3.250	Pradier Bernard	Eyes	–
MNHN-ZM-2016-472 PARATYPE	YA0346	2013.10.06	Puy-de-Dôme (63)	63320	Creste	45.533	3.033	Pradier Bernard	Molars, DNA	KU189627
MNHN-ZM-2017-2806	YA0347	2013.10.06	Puy-de-Dôme (63)	63320	Creste	45.533	3.033	Pradier Bernard	Molars, DNA	KU189628
–	YA0348	2013.10.06	Puy-de-Dôme (63)	63320	Creste	45.533	3.033	Desandre Bernard	Molars, DNA	KU189629
MNHN-ZM-2017-2807	YA0349	2013.10.15	Puy-de-Dôme (63)	63320	Creste	45.550	3.050	Pradier Bernard	Molars, DNA	KU189630
MNHN-ZM-2017-2808	YA0350	2013.10.15	Puy-de-Dôme (63)	63320	Creste	45.550	3.050	Pradier Bernard	Molars, DNA	KU189631
MNHN-ZM-2017-2809	YA0351	2013.10.15	Puy-de-Dôme (63)	63320	Creste	45.550	3.050	Pradier Bernard	Molars, DNA	KU189632
MNHN-ZM-2017-2810	YA0352	2013.10.15	Puy-de-Dôme (63)	63320	Creste	45.550	3.050	Pradier Bernard	Molars, DNA	KU189633
MNHN-ZM-2017-2811	YA0353	2013.10.16	Puy-de-Dôme (63)	63320	Creste	45.550	3.050	Pradier Bernard	Molars, DNA	KU189634
MNHN-ZM-2017-2812	YA0354	2013.10.16	Puy-de-Dôme (63)	63320	Creste	45.550	3.050	Pradier Bernard	Molars, DNA	KU189635
MNHN-ZM-2017-2813	YA0355	2013.10.16	Puy-de-Dôme (63)	63320	Creste	45.550	3.050	Pradier Bernard	Molars, DNA	KU189636
MNHN-ZM-2017-2814	YA0356	2013.10.16	Puy-de-Dôme (63)	63320	Creste	45.550	3.050	Pradier Bernard	Molars, DNA	KU189637
MNHN-ZM-2017-2815	YA0357	2013.10.16	Puy-de-Dôme (63)	63320	Creste	45.550	3.050	Pradier Bernard	Molars, DNA	KU189638
MNHN-ZM-2017-2816	YA0358	2013.10.18	Puy-de-Dôme (63)	63320	Creste	45.550	3.050	Pradier Bernard	Molars, DNA	KU189639
–	YA0359	2013.10.18	Puy-de-Dôme (63)	63320	Creste	45.550	3.050	Desandre Bernard	Molars, DNA	KU189640
MNHN-ZM-2018-2219	–	2018.01.23	Puy-de-Dôme (63)	63320	Creste	45.900	3.066	Pradier Bernard	Eyes	–
MNHN-ZM-2017-2804	YA0384	2014.03.14	Puy-de-Dôme (63)	63320	Champeix	45.589	3.129	Georgeon Jean-Michel	Molars, DNA	KU189651
MNHN-ZM-2017-2805	YA0385	2014.03.14	Puy-de-Dôme (63)	63320	Champeix	45.589	3.129	Georgeon Jean-Michel	Molars, DNA	KU189652
MNHN-ZM-MO-1986-98	–	–	Puy-de-Dôme (63)	63610	Besse-en-Chandesse	45.509	2.931	Heim de Balsac Henri	Molars	–
MNHN-ZM-2018-2226	–	2017.09.29	Puy-de-Dôme (63)	63610	Saint-Pierre-Colamine, Lomprat	45.883	2.966	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2227	–	2017.09.29	Puy-de-Dôme (63)	63610	Saint-Pierre-Colamine, Lomprat	45.883	2.966	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2228	–	2017.09.29	Puy-de-Dôme (63)	63610	Saint-Pierre-Colamine, Lomprat	45.883	2.966	Pradier Bernard	Eyes	–

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Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-2018-2229	–	2017.09.29	Puy-de-Dôme (63)	63610	Saint-Pierre-Colamine, Lomprat	45.883	2.966	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2230	–	2017.09.29	Puy-de-Dôme (63)	63610	Saint-Pierre-Colamine, Lomprat	45.883	2.966	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2231	–	2017.09.29	Puy-de-Dôme (63)	63610	Saint-Pierre-Colamine, Lomprat	45.883	2.966	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2232	–	2017.09.29	Puy-de-Dôme (63)	63610	Saint-Pierre-Colamine, Lomprat	45.883	2.966	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2233	–	2017.09.29	Puy-de-Dôme (63)	63610	Saint-Pierre-Colamine, Lomprat	45.883	2.966	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2234	–	2017.09.29	Puy-de-Dôme (63)	63610	Saint-Pierre-Colamine, Lomprat	45.883	2.966	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2235	–	2017.09.29	Puy-de-Dôme (63)	63610	Saint-Pierre-Colamine, Lomprat	45.883	2.966	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2236	–	2017.09.29	Puy-de-Dôme (63)	63610	Saint-Pierre-Colamine, Lomprat	45.883	2.966	Pradier Bernard	Eyes	–
MNHN-ZM-2018-2237	–	2017.09.29	Puy-de-Dôme (63)	63610	Saint-Pierre-Colamine, Lomprat	45.883	2.966	Pradier Bernard	Eyes	–
MNHN-ZM-2017-2817	YA0380	2014.02.20	Puy-de-Dôme (63)	63920	Peschadoires	45.827	3.493	Georgeon Jean-Michel	Molars, DNA	KU189647
MNHN-ZM-MO-1993-19	–	1960.04	Pyrénées	–	unknown	unknown	unknown	Lamotte Maxime	Eyes	–
–	Bayonne 3	2012.07.17	Pyrénées-Atlantiques (64)	64100	Plaine d'Ansot, Bayonne	43.470	-1.483	Eric Guiho (Musée Bayonne)	DNA	–
–	Bayonne 1	2009.10.01	Pyrénées-Atlantiques (64)	64150	Mourenx	43.379	-0.606	Eric Guiho (Musée Bayonne)	DNA	–
–	Bayonne 2	2009.10.01	Pyrénées-Atlantiques (64)	64150	Mourenx	43.379	-0.606	Eric Guiho (Musée Bayonne)	DNA	–
MNHN-ZM-2021-1388	VN1881	2018.07.19	Pyrénées-Atlantiques (64)	64440	Eaux-Bonnes, lieu-dit Gravette, Bois des crétets	42.950	-0.333	Grisvard Pierre	Molars	–
MNHN-ZM-2021-1389	VN1860	2018.06.01	Pyrénées-Orientales (66)	66360	Col de Mantet, Py	42.617	2.321	Benumes Jérémy	Eyes, DNA	–
MNHN-ZM-2017-2821	YA0117	2008.07.07	Pyrénées-Orientales (66)	66360	Py	42.496	2.350	Guisset Claude	Molars, DNA	KU189596
MNHN-ZM-2021-1393	VN1861	2018.06.04	Pyrénées-Orientales (66)	66360	Mantet, La Farga	42.500	2.359	Feliu Carlos	Eyes, DNA	–
MNHN-ZM-2021-1390	VN1862	2018.06.01	Pyrénées-Orientales (66)	66360	Mantet, La Farga	42.500	2.359	Feliu Carlos	Eyes, DNA	–
–	YA0501	2016.02.22	Pyrénées-Orientales (66)	66360	Sahorre	42.533	2.362	Benumes Jérémy	DNA	–
–	YA0503	2016.03.04	Pyrénées-Orientales (66)	66360	Sahorre	42.533	2.362	Benumes Jérémy	DNA	–
–	2003101508	–	Pyrénées-Orientales (66)	66360	Py Natural Reserve	42.469	2.363	–	DNA	–
MNHN-ZM-2017-3172	–	1905.07.09	Pyrénées-Orientales (66)	66360	Py Natural Reserve	42.469	2.363	Hugot Jean-Pierre	Eyes, DNA	–
–	YA0502	2016.06.24	Pyrénées-Orientales (66)	66500	Nohèdes	42.623	2.289	Coulon Florine	DNA	–
MNHN-ZM-2021-1391	VN1858	2018.06.01	Pyrénées-Orientales (66)	66500	Conat-Betllans	42.617	2.321	Champagnat Alain	Eyes, DNA	–
MNHN-ZM-2021-1392	VN1859	2018.06.01	Pyrénées-Orientales (66)	66500	Conat-Betllans	42.617	2.321	Champagnat Alain	Eyes, DNA	–

Appendix 1. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
–	YA0374	–	Pyrénées-Orientales (66)	66500	Mosset	42.669	2.348	Ribas Alexis	DNA	KU189641
–	YA0375	–	Pyrénées-Orientales (66)	66500	Mosset	42.669	2.348	Ribas Alexis	DNA	KU189642
–	YA0376	–	Pyrénées-Orientales (66)	66500	Mosset	42.669	2.348	Ribas Alexis	DNA	KU189643
–	YA0377	–	Pyrénées-Orientales (66)	66500	Mosset	42.669	2.348	Ribas Alexis	DNA	KU189644
–	YA0378	–	Pyrénées-Orientales (66)	66500	Mosset	42.669	2.348	Ribas Alexis	DNA	KU189645
–	YA0379	–	Pyrénées-Orientales (66)	66500	Mosset	42.669	2.348	Ribas Alexis	DNA	KU189646
–	YA0500	2016.07.25	Pyrénées-Orientales (66)	66500	Conat-Betllans	42.612	2.351	Morichon David	DNA	–
–	2007062CONAT = 2007062201	–	Pyrénées-Orientales (66)	66500	Conat Natural Reserve	42.614	2.357	–	DNA	–
–	YA0441	2014.08.01	Pyrénées-Orientales (66)	66500	Campôme	42.651	2.376	Pagès Gabriel	DNA	–
BMNH 8.8.4.133	–	1906.09.05	Pyrénées-Orientales (66)	66760	Porta	42.527	1.826	–	Molars	–
BMNH 8.9.1.37	–	1906.09.03	Pyrénées-Orientales (66)	66760	Porta	42.527	1.826	–	Molars	–
–	LPO Aveyron 18	2019.06.05	Tarn (81)	81140	Puycelci, Sainte-Catherine	43.980	1.666	Grèzes Jean-Philippe	Eyes	–
MHNT 440-1	–	1905.06.27	Tarn (81)	81500	Garrigues	43.694	1.719	–	DNA	–
MHNT 440-2	–	1905.06.27	Tarn (81)	81500	Garrigues	43.694	1.719	–	DNA	–
–	LPO Aveyron 10	2018.11.24	Tarn (81)	81800	Rabastens, Guillart	43.842	1.731	Grèzes Jean-Philippe	Eyes	–
MHNT 789	–	1905.07.03	Tarn-et-Garonne (82)	82600	Mas-Grenier	43.891	1.197	–	DNA	–
MHNT OST AC 692	–	–	Tarn-et-Garonne (82)	82600	Mas-Grenier	43.891	1.197	–	Molars	–
MNHN-ZM-2006-384	–	–	Tarn-et-Garonne (82)	82600	Mas-Grenier	43.900	1.200	–	Molars	–
MVZ:Mamm:122043	–	1949.02.01	Tarn-et-Garonne (82)	82600	Mas-Grenier	43.900	1.200	–	Molars	–
–	YA0442	2015.05.01	Tarn-et-Garonne (82)	82800	Bioule	44.090	1.539	Petit Daniel	Eyes	–
MNHN-ZM-MO-1984-786	–	–	unknown	–	unknown	unknown	unknown	Didier Robert	Eyes	–
BMNH 8.8.4.134	–	1908.04.02	Var (83)	83700	Saint-Raphaël, Valescure	43.455	6.790	–	Molars	–
BMNH 8.8.4.135	–	1908.04.14	Var (83)	83700	Saint-Raphaël, Agay	43.432	6.855	–	Molars	–
MNHN-ZM-2017-2822	YA0396	–	Vendée (85)	85200	Fontenay-le-Comte (L'Orbul)	46.466	-0.816	Derosier Michel	Molars, DNA	KU189662
MNHN-ZM-2017-2823	YA0397	–	Vendée (85)	85200	Fontenay-le-Comte (L'Orbul)	46.466	-0.816	Derosier Michel	Molars, DNA	KU189663
MNHN-ZM-2017-2824	YA0398	–	Vendée (85)	85200	Fontenay-le-Comte (L'Orbul)	46.466	-0.816	Derosier Michel	Molars, DNA	KU189664
MNHN-ZM-2017-2825	YA0399	–	Vendée (85)	85200	Fontenay-le-Comte (L'Orbul)	46.466	-0.816	Derosier Michel	Molars, DNA	KU189665
MNHN-ZM-2017-2826	YA0400	–	Vendée (85)	85200	Fontenay-le-Comte (L'Orbul)	46.466	-0.816	Derosier Michel	Molars, DNA	KU189666
MNHN-ZM-2017-2827	YA0401	–	Vendée (85)	85200	Fontenay-le-Comte (L'Orbul)	46.466	-0.816	Derosier Michel	Molars, DNA	KU189667
MNHN-ZM-2017-2828	YA0402	–	Vendée (85)	85200	Fontenay-le-Comte (L'Orbul)	46.466	-0.816	Derosier Michel	Molars, DNA	KU189668
MNHN-ZM-2017-2829	YA0403	–	Vendée (85)	85200	Fontenay-le-Comte (L'Orbul)	46.466	-0.816	Derosier Michel	Molars, DNA	KU189669

APPENDIX 1. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-2017-2830	YA0404	–	Vendée (85)	85200	Fontenay-le-Comte (L'Orbul)	46.466	-0.816	Derosier Michel	Molars, DNA	KU189670
MNHN-ZM-2017-2831	YA0405	–	Vendée (85)	85200	Fontenay-le-Comte (L'Orbul)	46.466	-0.816	Derosier Michel	Molars	–
–	YA0406	–	Vendée (85)	85200	Fontenay-le-Comte (L'Orbul)	46.466	-0.816	Derosier Michel	Molars, DNA	KU189671
MNHN-ZM-MO-1986-100	–	–	Vendée (85)	85330	Île de Noirmoutier	47.001	-2.247	–	Molars	–
–	Scorbé-Clairvaux 1	2019.04.12	Vienne (86)	86140	Scorbé-Clairvaux	46.803	0.455	Ladagnous Alain	Eyes	–
MNHN-ZM-2021-1495	Scorbé-Clairvaux 2	2019.04.01	Vienne (86)	86140	Scorbé-Clairvaux	46.803	0.455	Ladagnous Alain	Molars	–
MNHN-ZM-2021-1496	Scorbé-Clairvaux 3	2019.04.01	Vienne (86)	86140	Scorbé-Clairvaux	46.803	0.455	Ladagnous Alain	Molars	–
MNHN-ZM-2021-1497	Scorbé-Clairvaux 4	2019.04.01	Vienne (86)	86140	Scorbé-Clairvaux	46.803	0.455	Ladagnous Alain	Molars	–
MNHN-ZM-2021-1498	Scorbé-Clairvaux 5	2019.04.01	Vienne (86)	86140	Scorbé-Clairvaux	46.803	0.455	Ladagnous Alain	Molars	–
MNHN-ZM-2021-1394	VN1887	2019.04.01	Vienne (86)	86140	Scorbé-Clairvaux	46.803	0.455	Ladagnous Alain	Eyes	–
MNHN-ZM-2021-1395	VN1888	2019.04.01	Vienne (86)	86140	Scorbé-Clairvaux	46.803	0.455	Ladagnous Alain	Eyes	–
MNHN-ZM-2018-2263	–	1905.07.10	Vienne (86)	86150	Moussac	46.281	2.566	Nicolas Daniel	Eyes, DNA	–
MNHN-ZM-2018-2264	–	1905.07.10	Vienne (86)	86150	Moussac	46.281	2.566	Nicolas Daniel	Eyes, DNA	–
MNHN-ZM-2016-471	VN1789	–	Vienne (86)	86280	Saint-Benoit	46.545	0.347	Nicolas Violaine	Eyes, DNA	KU189595
–	VN1766	–	Vienne (86)	86280	Saint-Benoit	46.545	0.347	Nicolas Daniel	DNA	KU189594
MNHN-ZM-2021-1415	G12	2019.03.07	Hautes-Pyrénées (65)	65400	Gaillagos	42.980	-0.166	Duplantier Jean-Marc	Eyes	–
MNHN-ZM-2021-1416	G13	2019.05.19	Hautes-Pyrénées (65)	65400	Gaillagos	42.980	-0.166	Duplantier Jean-Marc	Eyes	–
MNHN-ZM-2021-1417	G14	2020.01.13	Hautes-Pyrénées (65)	65400	Gaillagos	42.980	-0.166	Duplantier Jean-Marc	Eyes	–
MNHN-ZM-2021-1418	G15	2020.01.18	Hautes-Pyrénées (65)	65400	Gaillagos	42.980	-0.166	Duplantier Jean-Marc	Eyes	–
MNHN-ZM-2021-1419	G16	2020.03.02	Hautes-Pyrénées (65)	65400	Gaillagos	42.980	-0.166	Duplantier Jean-Marc	Eyes	–
–	VN1920	2019.09.08	Gers (32)	32120	Taybosc	43.796	0.7476	Catil Jean-Michel	Eyes	–
–	VN1921	2019.03.30	Gers (32)	32400	Saint-Mont	43.650	-0.1556	Barthe Laurent	Eyes	–
MNHN-ZM-2017-724	–	–	Vendée (85)	85350	Île-d'Yeu	46.725	-2.349	–	Molars	–

Appendix 2. — Details on the specimens of *T. europaea* Linnaeus, 1758 included in this study with their geographic origin, collector name and how the species identification was carried out (DNA: genetic analysis based on Cytochrome b sequencing, Eyes: morphology of the eylelids, Molars: morphology of the molars). Abbreviations: **Lat.**, latitude; **Long.**, longitude; **Post.**, Postal code.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-MO-1932-3836	–	1909.07.	Ain (01)	01170	Col de la faucille	46.366	6.033	Mottaz Charles	Molars	–
MNHN-ZM-2017-2832	YA0335	2013.10.16	Ain (01)	01290	Grieges	46.259	4.854	Moncel Gwendoline	DNA	KU189566
MNHN-ZM-2017-2833	YA0336	2013.10.16	Ain (01)	01290	Grieges	46.259	4.854	Moncel Gwendoline	Molars, DNA	KU189567
MNHN-ZM-2017-2837	YA0324	2013.09.12	Ain (01)	01290	Pont-de-Veyle	46.268	4.880	Moncel Gwendoline	Molars, DNA	KU189560
MNHN-ZM-2017-2838	YA0325	2013.09.12	Ain (01)	01290	Pont-de-Veyle	46.268	4.880	Moncel Gwendoline	Molars, DNA	KU189561
–	YA0326	2013.09.12	Ain (01)	01290	Pont-de-Veyle	46.268	4.880	Moncel Gwendoline	Molars	–
MNHN-ZM-2017-2839	YA0327	2013.09.12	Ain (01)	01290	Pont-de-Veyle	46.268	4.880	Moncel Gwendoline	Molars	–
MNHN-ZM-2017-2840	YA0328	2013.09.12	Ain (01)	01290	Pont-de-Veyle	46.268	4.880	Moncel Gwendoline	Molars	–
MNHN-ZM-2017-2844	YA0333	2013.09.27	Ain (01)	01290	Pont-de-Veyle	46.268	4.880	Moncel Gwendoline	Molars	–
MNHN-ZM-2017-2841	YA0329	2013.09.12	Ain (01)	01290	Pont-de-Veyle	46.263	4.884	Moncel Gwendoline	Molars, DNA	KU189562
MNHN-ZM-2017-2842	YA0330	2013.09.12	Ain (01)	01290	Pont-de-Veyle	46.263	4.884	Moncel Gwendoline	Molars, DNA	KU189563
MNHN-ZM-2017-2843	YA0331	2013.09.12	Ain (01)	01290	Pont-de-Veyle	46.263	4.884	Moncel Gwendoline	Molars	–
MNHN-ZM-2017-2834	YA0320	2013.08.28	Ain (01)	01290	Pont-de-Veyle	46.262	4.888	Moncel Gwendoline	DNA	KU189558
MNHN-ZM-2017-2835	YA0321	2013.08.28	Ain (01)	01290	Pont-de-Veyle	46.262	4.888	Moncel Gwendoline	DNA	KU189559
MNHN-ZM-2017-2836	YA0322	2013.08.28	Ain (01)	01290	Pont-de-Veyle	46.262	4.888	Moncel Gwendoline	Molars	–
MNHN-ZM-2017-2845	YA0337	2013.10.16	Ain (01)	01290	Pont-de-Veyle	46.262	4.888	Moncel Gwendoline	Molars	–
MHNG 1811-057	M874	2001.03.28	Ain (01)	01550	Pougny	46.133	5.951	Studer J.	Molars, DNA	–
MHNL 40000790	–	–	Ain (01)	01330	Villars-les-Dombes	46.000	5.016	Côte Claudius	Eyes	–
MVZ:Mamm:103930	–	1945.07.03	Aisne (02)	02400	Château-Thierry	49.050	3.400	–	Molars	–
MNHN-ZM-MO-1990-943	–	–	Aisne (02)	02408	Laon	49.563	3.624	Cassonnet Gilles	Eyes	–
MNHN-ZM-MO-2004-1	–	2002.09.01	Aisne (02)	02408	Laon	49.563	3.624	Cassonnet Gilles	Eyes	–
MNHN-ZM-MO-1986-414	–	–	Aisne (02)	02140	Saint-Gobert (Château)	49.800	3.814	Taquet Philippe	Eyes, DNA	KU189428
MNHN-ZM-MO-1997-1869	–	–	Allier (03)	03210	Agonges, Le grand Monceau	46.836	3.301	Ineich Ivan	Eyes	–
MNHN-ZM-MO-1997-1870	–	–	Allier (03)	03210	Agonges, Le grand Monceau	46.836	3.301	Ineich Ivan	Eyes	–
MNHN-ZM-MO-1997-1868	–	–	Allier (03)	03210	Agonges, Le grand Monceau	46.836	3.301	Ineich Ivan	Eyes, DNA	KU189438
MZS Mam03920	–	–	Alsace region	–	unknown	unknown	unknown	–	Molars	–
MZS Mam03926	–	–	Bas-Rhin (67)	67400	Geispolsheim	48.516	7.650	–	Molars	–
MZS Mam03901	–	–	Bas-Rhin (67)	67400	Geispolsheim	48.516	7.650	–	Molars, DNA	–
MZS Mam03899	–	–	Bas-Rhin (67)	67380	Lingolsheim	48.581	7.702	–	Molars	–
MZS Mam03902	–	–	Bas-Rhin (67)	67380	Lingolsheim	48.581	7.702	–	Molars	–
MZS Mam03903	–	–	Bas-Rhin (67)	67380	Lingolsheim	48.581	7.702	–	Molars	–
MZS Mam03904	–	–	Bas-Rhin (67)	67380	Lingolsheim	48.581	7.702	–	Molars	–
MZS Mam03906	–	–	Bas-Rhin (67)	67380	Lingolsheim	48.581	7.702	–	Molars	–
MZS Mam03911	–	–	Bas-Rhin (67)	67380	Lingolsheim	48.581	7.702	–	Molars	–
MZS Mam03912	–	–	Bas-Rhin (67)	67380	Lingolsheim	48.581	7.702	–	Molars	–
MZS Mam03914	–	–	Bas-Rhin (67)	67380	Lingolsheim	48.581	7.702	–	Molars	–
MZS Mam03917	–	–	Bas-Rhin (67)	67380	Lingolsheim	48.581	7.702	–	Molars	–
MZS Mam03922	–	–	Bas-Rhin (67)	67380	Lingolsheim	48.581	7.702	–	Molars	–
MZS Mam03900	–	–	Bas-Rhin (67)	67380	Lingolsheim	48.581	7.702	–	Molars, DNA	–
MZS Mam03908	–	–	Bas-Rhin (67)	67380	Lingolsheim	48.581	7.702	–	Molars, DNA	–
MZS Mam03925	–	–	Bas-Rhin (67)	67530	Mont Sainte-Odile	48.437	7.404	–	Molars, DNA	–
MZS mam04364	–	–	Bas-Rhin (67)	67000	Strasbourg	48.573	7.752	–	Eyes	–
MZS Mam03919	–	–	Bas-Rhin (67)	67000	Strasbourg	48.573	7.752	–	Molars	–
BMNH 65.3519	–	1964.08.08	Bouches-du-Rhône (13)	13200	Tour du Valat	43.508	4.667	–	Molars	–
MNHN-ZM-MO-1993-4220	–	1991.11.10	Calvados (14)	14600	Honfleur	49.419	0.232	Komerovsky Isabelle	Eyes, DNA	KU189433

APPENDIX 2. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-MO-1993-4221	–	1991.11.11	Calvados (14)	14600	Honfleur	49.419	0.232	Komerovsky Isabelle	Eyes, DNA	KU189434
MNHN-ZM-MO-1967-1430	–	1966.06.12	Côte-d'Or (21)	21520	Louesme	47.897	4.759	Pfeffer Pierre	Molars, DNA	KU189427
MNHN-ZM-2021-1396	VN1902	2020.05.15	Côtes d'armor (22)	22160	Callac	48.400	-3.433	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1404	VN1903	2020.06.29	Côtes d'armor (22)	22160	Callac	48.400	-3.433	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1405	VN1904	2020.05.15	Côtes d'armor (22)	22160	Callac	48.400	-3.433	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1406	VN1905	2020.07.03	Côtes d'armor (22)	22160	Callac	48.400	-3.433	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1407	VN1906	2020.07.09	Côtes d'armor (22)	22160	Callac	48.400	-3.433	Lagrue Denis	Eyes	–
–	VN1907	2020..	Côtes d'armor (22)	22160	Callac	48.400	-3.433	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1402	VN1908	2020.04.19	Côtes d'armor (22)	22160	Callac	48.400	-3.433	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1403	VN1909	2020.03.30	Côtes d'armor (22)	22160	Callac	48.400	-3.433	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1406	VN1896	–	Côtes d'armor (22)	22160	Callac, Le Peulven	48.409	-3.421	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1407	VN1897	–	Côtes d'armor (22)	22160	Callac, Le Peulven	48.409	-3.421	Lagrue Denis	Eyes	–
–	YA0496	2016.04.12	Côtes d'armor (22)	22160	Callac, Le Peulven	48.409	-3.424	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1397	VN1910	2020.06.20	Côtes d'armor (22)	22160	Duault	48.366	-3.433	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1398	VN1911	2020.06.20	Côtes d'armor (22)	22160	Duault	48.366	-3.433	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1399	VN1912	2020.06.20	Côtes d'armor (22)	22160	Duault	48.366	-3.433	Lagrue Denis	Eyes	–
–	VN1913	2020.06.20	Côtes d'armor (22)	22160	Duault	48.366	-3.433	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1400	VN1914	2020.06.20	Côtes d'armor (22)	22160	Duault	48.366	-3.433	Lagrue Denis	Eyes	–
MNHN-ZM-2021-1401	VN1915	2020.06.23	Côtes d'armor (22)	22160	Duault	48.366	-3.433	Lagrue Denis	Eyes	–
–	YA0161	2013.06.07	Côtes d'armor (22)	22690	La Vicomté-sur-Rance	48.569	-1.996	Burgot François	Molars, DNA	KU189489
MNHN-ZM-2017-2846	YA0173	2013.06.07	Côtes d'armor (22)	22690	La Vicomté-sur-Rance	48.569	-1.996	Burgot François	Molars, DNA	KU189498
MNHN-ZM-2017-2847	YA0180	2013.06.07	Côtes d'armor (22)	22690	La Vicomté-sur-Rance	48.569	-1.996	Burgot François	Molars, DNA	KU189499
MNHN-ZM-2017-2848	YA0186	2013.06.07	Côtes d'armor (22)	22690	La Vicomté-sur-Rance	48.569	-1.996	Burgot François	Molars, DNA	KU189501
MNHN-ZM-MO-1992-1451	–	1992.08.13	Côtes d'armor (22)	22250	Matignon	48.600	-2.300	Erard Christian	Eyes, DNA	KU189430
–	YA0181	2013.06.04	Côtes d'armor (22)	22690	Pleudihen-sur-Rance	48.510	-1.952	Burgot François	Molars	–
MNHN-ZM-2017-2849	YA0181.1	2013.06.04	Côtes d'armor (22)	22690	Pleudihen-sur-Rance	48.510	-1.952	Burgot François	Molars	–
MNHN-ZM-2017-2850	YA0181.2	2013.06.04	Côtes d'armor (22)	22690	Pleudihen-sur-Rance	48.510	-1.952	Burgot François	Molars	–
MNHN-ZM-2018-603	–	2017.12.06	Côtes d'armor (22)	22650	Ploubalay	48.583	-2.150	Burgot François	Eyes, DNA	–
MNHN-ZM-2018-604	–	2017.12.06	Côtes d'armor (22)	22650	Ploubalay	48.583	-2.150	Burgot François	Eyes, DNA	–
MNHN-ZM-2017-2862	YA0171	2013.06.11	Côtes d'armor (22)	22430	Plouër-sur-Rance	48.527	-2.003	Burgot François	Molars, DNA	KU189496
MNHN-ZM-2017-2863	YA0172	2013.06.11	Côtes d'armor (22)	22430	Plouër-sur-Rance	48.527	-2.003	Burgot François	Molars, DNA	KU189497
MNHN-ZM-2017-2854	YA0167	2013.06.11	Côtes d'armor (22)	22490	Plouër-sur-Rance	48.527	-2.003	Burgot François	Molars	–
MNHN-ZM-2017-2861	YA0170	2013.06.11	Côtes d'armor (22)	22490	Plouër-sur-Rance	48.527	-2.003	Burgot François	Molars, DNA	KU189495
MNHN-ZM-2017-2855	YA0174	2013.06.11	Côtes d'armor (22)	22490	Plouër-sur-Rance	48.527	-2.003	Burgot François	Molars	–
MNHN-ZM-2017-2856	YA0175	2013.06.03	Côtes d'armor (22)	22490	Plouër-sur-Rance	48.527	-2.003	Burgot François	Molars	–
MNHN-ZM-2017-2857	YA0176	2013.06.03	Côtes d'armor (22)	22490	Plouër-sur-Rance	48.527	-2.003	Burgot François	Molars	–
MNHN-ZM-2017-2858	YA0177	2013.06.03	Côtes d'armor (22)	22490	Plouër-sur-Rance	48.527	-2.003	Burgot François	Molars	–
MNHN-ZM-2017-2859	YA0178	2013.06.03	Côtes d'armor (22)	22490	Plouër-sur-Rance	48.527	-2.003	Burgot François	Molars	–
MNHN-ZM-2017-2860	YA0179	2013.06.03	Côtes d'armor (22)	22490	Plouër-sur-Rance	48.527	-2.003	Burgot François	Molars	–
MNHN-ZM-2018-594	–	2017.09.28	Côtes d'armor (22)	22490	Plouër-sur-Rance	48.527	-2.003	Burgot François	Eyes, DNA	–
MNHN-ZM-2018-598	–	2017.11.10	Côtes d'armor (22)	22490	Plouër-sur-Rance	48.527	-2.003	Burgot François	Eyes, DNA	–
MNHN-ZM-2018-599	–	2017.11.10	Côtes d'armor (22)	22490	Plouër-sur-Rance	48.527	-2.003	Burgot François	Eyes, DNA	–
MNHN-ZM-2018-595	–	2017.10.05	Côtes d'armor (22)	22491	Plouër-sur-Rance	48.527	-2.003	Burgot François	Eyes, DNA	–
–	YA0004	2012.03.19	Côtes d'armor (22)	22160	Plusquellec	48.402	-3.464	Quemener Léon	Eyes	–
MNHN-ZM-MO-1932-1659	–	1904.10.15	Doubs (25)	25460	Etupes	47.500	6.866	Mottaz Charles	Molars	–
MNHN-ZM-MO-1932-3818	–	1907.11.08	Doubs (25)	25460	Etupes	47.500	6.866	Mottaz Charles	Molars	–
MNHN-ZM-MO-1932-3822	–	1904.10.15	Doubs (25)	25460	Etupes	47.500	6.866	Mottaz Charles	Molars	–
MNHN-ZM-MO-1932-3837	–	1907.11.08	Doubs (25)	25460	Etupes	47.500	6.866	Mottaz Charles	Molars	–
MNHN-ZM-MO-1932-3852	–	1904.09.26	Doubs (25)	25460	Etupes	47.500	6.866	Mottaz Charles	Molars	–

Appendix 2. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-2017-2864	YA0225	2013.09.24	Essonne (91)	91099	Boutigny	48.437	2.380	Dormion Jérôme	Molars, DNA	KU189526
MNHN-ZM-MO-1993-616	–	1964.05.26	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-617	–	1964.08.20	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-618	–	1965.04.06	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-619	–	1965.05.03	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-620	–	1965.05.04	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-622	–	1965.05.15	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-623	–	1965.05.21	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-624	–	1965.06.01	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-625	–	1965.06.04	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-626	–	1965.06.05	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-627	–	1965.07.23	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-631	–	1965.12.21	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-632	–	1965.12.22	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-633	–	1965.12.22	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-634	–	1965.12.22	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-637	–	1965.02.04	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-638	–	1966.02.07	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-639	–	1966.02.07	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-640	–	1966.02.08	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-641	–	1966.02.09	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-642	–	1966.02.11	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-643	–	1966.03.03	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-644	–	1966.03.05	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-645	–	1966.03.08	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-646	–	1966.03.14	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-647	–	1967.01.17	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-648	–	1967.01.27	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-649	–	1967.01.27	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-650	–	1967.01.27	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-651	–	1967.01.27	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-652	–	1967.01.27	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-654	–	1967.02.20	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-655	–	1905.05.20	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-657	–	1967.02.22	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-658	–	1959.06.06	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-659	–	1959.07.29	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-660	–	1967.03.15	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-662	–	1967.03.14	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-663	–	1967.02.23	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-664	–	–	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-665	–	1968.02.28	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-666	–	1968.02.29	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-667	–	1968.02.28	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-668	–	1968.03.05	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-669	–	1968.03.27	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-670	–	1969.01.12	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-671	–	1969.01.13	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-672	–	1969.01.14	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-674	–	1969.01.08	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-675	–	1969.01.20	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–

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Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-MO-1993-676	–	1969.01.20	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-677	–	1968.12.27	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-678	–	1969.01.16	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-679	–	1969.01.16	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-709	–	–	Essonne (91)	91800	Brunoy	48.700	2.500	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-2005-38	–	1962.03.15	Essonne (91)	91800	Brunoy	48.698	2.504	Petter Francis	Eyes	–
MNHN-ZM-2017-2865	YA0206	2013.08.07	Essonne (91)	91190	Gif-sur-Yvette	48.701	2.134	Dormion Jérôme	Molars, DNA	KU189518
MNHN-ZM-2017-2866	YA0207	2013.08.07	Essonne (91)	91190	Gif-sur-Yvette	48.701	2.134	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2867	YA0221	2013.09.24	Essonne (91)	91190	Gif-sur-Yvette	48.701	2.134	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2868	YA0222	2013.09.24	Essonne (91)	91190	Gif-sur-Yvette	48.701	2.134	Dormion Jérôme	Molars, DNA	KU189523
MNHN-ZM-2017-2869	YA0223	2013.09.24	Essonne (91)	91190	Gif-sur-Yvette	48.701	2.134	Dormion Jérôme	Molars, DNA	KU189524
MNHN-ZM-2017-2870	YA0224	2013.09.24	Essonne (91)	91190	Gif-sur-Yvette	48.701	2.134	Dormion Jérôme	Molars, DNA	KU189525
–	YA0055	2012.10.18	Essonne (91)	91490	Oncy, École	48.381	2.475	Dormion Jérôme	DNA	KU189459
MNHN-ZM-2017-2871	YA0208	2013.08.07	Essonne (91)	91640	Vaugrigneuse	48.603	2.120	Dormion Jérôme	Molars, DNA	KU189519
MNHN-ZM-2017-2872	YA0209	2013.08.07	Essonne (91)	91640	Vaugrigneuse	48.603	2.120	Dormion Jérôme	Molars, DNA	KU189520
MNHN-ZM-2017-2873	YA0210	2013.08.07	Essonne (91)	91640	Vaugrigneuse	48.603	2.120	Dormion Jérôme	Molars, DNA	KU189521
MNHN-ZM-MO-1983-777	–	–	Essonne (91)	91640	Vaugrineuse	48.603	2.120	Métivier Bernard	Eyes	–
MNHN-ZM-MO-1983-778	–	–	Essonne (91)	91640	Vaugrineuse	48.603	2.120	Métivier Bernard	Eyes	–
MNHN-ZM-MO-1993-3218	–	1982.12.30	Essonne (91)	91640	Vaugrineuse	48.603	2.120	Métivier Bernard	Eyes	–
MNHN-ZM-MO-1993-3219	–	1982.12.30	Essonne (91)	91640	Vaugrineuse	48.603	2.120	Métivier Bernard	Eyes	–
MNHN-ZM-MO-1993-3220	–	1983.03	Essonne (91)	91640	Vaugrineuse	48.603	2.120	Métivier Bernard	Eyes	–
MNHN-ZM-MO-1993-3221	–	1982..	Essonne (91)	91640	Vaugrineuse	48.603	2.120	Métivier Bernard	Eyes	–
MNHN-ZM-MO-1993-3222	–	1982..	Essonne (91)	91640	Vaugrineuse	48.603	2.120	Métivier Bernard	Eyes	–
MNHN-ZM-MO-1993-3234	–	1980.11.	Essonne (91)	91640	Vaugrineuse	48.603	2.120	Métivier Bernard	Eyes	–
MNHN-ZM-MO-1993-3235	–	1980.11.	Essonne (91)	91640	Vaugrineuse	48.603	2.120	Métivier Bernard	Eyes	–
MNHN-ZM-MO-1998-402	–	1985.06.19	Essonne (91)	91640	Vaugrineuse	48.603	2.120	Métivier Bernard	Eyes	–
–	VN1916	1991.04.	Essonne (91)	91640	Vaugrineuse	48.603	2.120	Métivier Bernard	Eyes	–
MNHN-ZM-2021-1408	VN1917	1991.04.	Essonne (91)	91640	Vaugrineuse	48.603	2.120	Métivier Bernard	Eyes	–
MNHN-ZM-MO-1990-660	–	1983.10.23	Essonne (91)	91640	Vaugrineuse, Hameau de l'Orme Gras	48.599	2.116	Métivier Bernard	Molars	–
MNHN-ZM-MO-1993-1708	–	1979.04.11	Essonne (91)	91640	Vaugrineuse, Hameau de l'Orme Gras	48.603	2.120	Métivier Bernard	Eyes	–
MNHN-ZM-MO-1953-829	–	–	Essonne (91)	91370	Verrières-le-Buisson	48.750	2.266	Albisson	Molars	–
MHNN.Z.025635	–	–	Eure-et-Loir (28)	28000	Chartres	48.446	1.489	–	Molars	–
MHNN.Z.025640	–	–	Eure-et-Loir (28)	28000	Chartres	48.446	1.489	–	Molars	–
MHNN.Z.025642	–	–	Eure-et-Loir (28)	28000	Chartres	48.446	1.489	–	Molars	–
MHNN.Z.025646	–	–	Eure-et-Loir (28)	28000	Chartres	48.446	1.489	–	Molars	–
MNHN SPOT4238	–	–	Eure-et-Loir (28)	28290	Courtalain	48.083	1.150	–	DNA	KF801511
MNHN-ZM-MO-1933-1657	–	–	Gard (30)	30190	Saint-Geniès-de-Malgoires	43.950	4.216	Mottaz Charles	Eyes	–
MNHN-ZM-MO-1986-99	–	1930.04.14	Gard (30)	30190	Saint-Geniès-de-Malgoires	43.950	4.216	Heim de Balsac Henri	Molars, DNA	–
NMNH 172105	7597	1908.04.23	Gard (30)	30800	Saint-Gilles	43.683	4.433	Miller G. S.	Molars	–
MHNN.Z.025638	–	–	Haute-Garonne (31)	31110	Juzet-de-Luchon, Prairie de la source ferrugineuse de sémoles	42.816	0.616	–	Molars	–
–	YA0017	2012.08.01	Haute-Marne (52)	52501	Charmoy	47.808	5.617	Amouretti Paul	DNA	KU189442
–	YA0057	2012.09.18	Haute-Marne (52)	52500	La Ferté-sur-Amance	47.875	5.712	Desandre Bernard	DNA	KU189461
MNHN-ZM-2013-160	YA0058	2012.12.19	Haute-Marne (52)	52500	La Ferté-sur-Amance	47.875	5.712	Desandre Bernard	Eyes, DNA	KU189462
MNHN-ZM-2017-2877	YA0363	2013.10.01	Hautes-Alpes (05)	05320	La Grave	45.053	6.286	Giroud Michèle	DNA	KU189569
–	YA0369	2013.10.01	Hautes-Alpes (05)	05320	La Grave	45.053	6.286	Giroud Michèle	Molars, DNA	KU189572

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Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-2017-2883	YA0370	2013.10.01	Hautes-Alpes (05)	05320	La Grave	45.053	6.286	Giroud Michèle	Molars, DNA	KU189573
MNHN-ZM-2017-2884	YA0371	2013.10.01	Hautes-Alpes (05)	05320	La Grave	45.053	6.286	Giroud Michèle	Molars, DNA	KU189574
MNHN-ZM-2017-2880	YA0366	2013.10.01	Hautes-Alpes (05)	05320	La Grave	45.055	6.300	Giroud Michèle	DNA	KU189570
MNHN-ZM-2017-2874	YA0360	2013.10.01	Hautes-Alpes (05)	05320	La Grave	45.046	6.306	Giroud Michèle	Molars, DNA	KU189568
MNHN-ZM-2017-2876	YA0362	2013.10.01	Hautes-Alpes (05)	05320	La Grave	45.046	6.306	Giroud Michèle	Molars	–
MNHN-ZM-2017-2878	YA0364	2013.10.01	Hautes-Alpes (05)	05320	La Grave	45.046	6.306	Giroud Michèle	Molars	–
MNHN-ZM-2017-2879	YA0365	2013.10.01	Hautes-Alpes (05)	05320	La Grave	45.046	6.306	Giroud Michèle	Molars	–
MNHN-ZM-2017-2881	YA0367	2013.10.01	Hautes-Alpes (05)	05320	La Grave	45.036	6.399	Giroud Michèle	Molars, DNA	KU189571
MNHN-ZM-MO-1994-3085	–	–	Haute-Saône (70)	70100	Gray	47.450	5.583	Houin René	Molars	–
MNHN-ZM-MO-1994-3086	–	–	Haute-Saône (70)	70100	Gray	47.450	5.583	Houin René	Molars	–
MHNG 3002-007	M2195	2016.06.26	Haute-Savoie (74)	74420	Boëge	46.218	6.350	Cibois A.	Molars	–
BMNH 5.11.18.4	–	1905.06.10	Haute-Savoie (74)	74380	Cranves-Sales	46.183	6.300	–	Molars	–
MHNG 1981-060	M1704	2012.06.02	Haute-Savoie (74)	74350	Menthonnex-en-Bornes	46.059	6.178	Reuteler C.	Molars, DNA	–
MHNG 1940-046	M1276A	2006.08.06	Haute-Savoie (74)	74430	Saint-Jean-d'Aulps, Essert-la-Pierre	46.216	6.673	Gillioz M.	Molars, DNA	–
MNHN-ZM-MO-1943-179	–	1943.07.	Haute-Savoie (74)	74340	Samoens	46.077	6.724	Villiers André	Molars	–
BMNH 97.1.9.1	–	1896.11.21	Haute-Savoie (74)	74910	Seyssel, Montauban	45.959	5.836	–	Molars	–
MZS Mam03896	–	–	Haut-Rhin (68)	68370	Orbey, Lac Blanc	48.136	7.088	–	Molars, DNA	–
MZS Mam03898	–	–	Haut-Rhin (68)	68370	Orbey, Lac Blanc	48.136	7.088	–	Molars, DNA	–
MZS Mam03909	–	–	Haut-Rhin (68)	68370	Orbey, Lac Blanc	48.136	7.088	–	Molars, DNA	–
MNHN-ZM-2013-158	YA0014	2012.06.	Île de France	–	unknown	unknown	unknown	Dormion Jérôme	Eyes	–
MNHN-ZM-2013-159	YA0015	2012.06.	Île de France	–	unknown	unknown	unknown	Dormion Jérôme	Eyes	–
MNHN-ZM-2017-2885	YA0159	2013.06.07	Ille-et-Vilaine (35)	35125	Baguer-Pican	48.553	-1.699	Burgot François	Molars	–
MNHN-ZM-2017-2886	YA0160	2013.06.07	Ille-et-Vilaine (35)	35125	Baguer-Pican	48.553	-1.699	Burgot François	DNA	KU189488
–	YA0163	2013.06.07	Ille-et-Vilaine (35)	35125	Baguer-Pican	48.553	-1.699	Burgot François	Molars, DNA	KU189491
MNHN-ZM-2017-2887	YA0165	2013.06.07	Ille-et-Vilaine (35)	35125	Baguer-Pican	48.553	-1.699	Burgot François	Molars, DNA	KU189492
MNHN-ZM-2017-2888	YA0137	2012.06.23	Ille-et-Vilaine (35)	35310	Bréal-sous-Montfort	48.067	-1.892	Deputte Bertrand	Molars, DNA	KU189469
MNHN-ZM-2017-2889	YA0157	2013.06.27	Ille-et-Vilaine (35)	35120	La Boussac	48.512	-1.660	Burgot François	Molars	–
MNHN-ZM-2017-2890	YA0158	2013.06.27	Ille-et-Vilaine (35)	35120	La Boussac	48.512	-1.660	Burgot François	Molars, DNA	KU189487
–	YA0168	2013.06.27	Ille-et-Vilaine (35)	35120	La Boussac	48.512	-1.660	Burgot François	Molars, DNA	KU189493
MNHN-ZM-2018-601	–	2017.12.04	Ille-et-Vilaine (35)	35870	Le Minihic-sur-Rance	48.523	-1.573	Burgot François	Eyes, DNA	–
MNHN-ZM-2018-602	–	2017.12.04	Ille-et-Vilaine (35)	35870	Le Minihic-sur-Rance	48.523	-1.573	Burgot François	Eyes, DNA	–
–	YA0162	2013.06.04	Ille-et-Vilaine (35)	35120	Mont-Dol	48.570	-1.769	Burgot François	Molars, DNA	KU189490
MNHN-ZM-2018-597	–	17/10.2017	Ille-et-Vilaine (35)	35540	Plerguer	48.474	-1.409	Burgot François	Eyes, DNA	–
–	YA0156	2013.06.21	Ille-et-Vilaine (35)	35730	Pleurtuit	48.579	-2.059	Burgot François	Molars, DNA	KU189486
MNHN-ZM-2018-600	–	2017.11.13	Ille-et-Vilaine (35)	35730	Pleurtuit	48.579	-2.059	Burgot François	Eyes, DNA	–
MNHN-ZM-2017-2894	YA0154	2013.06.26	Ille-et-Vilaine (35)	35800	Saint-Briac	48.619	-2.132	Burgot François	Molars, DNA	KU189484
–	YA0155	2013.06.26	Ille-et-Vilaine (35)	35800	Saint-Briac	48.619	-2.132	Burgot François	Molars, DNA	KU189485
MNHN-ZM-2018-596	–	2017.10.06	Ille-et-Vilaine (35)	35800	Saint-Briac	48.619	-2.132	Burgot François	Eyes, DNA	–
MNHN-ZM-2017-2895	YA0183	2013.05.11	Ille-et-Vilaine (35)	35350	Saint-Jouan-des-Guerets	48.599	-1.972	Burgot François	Molars	–
MNHN-ZM-2017-2897	YA0185	2013.05.11	Ille-et-Vilaine (35)	35350	Saint-Jouan-des-Guerets	48.599	-1.972	Burgot François	Molars, DNA	KU189500
MNHN-ZM-2018-605	–	2017.12.26	Ille-et-Vilaine (35)	35800	Saint-Lunaire	48.582	-1.669	Burgot François	Eyes, DNA	–
MNHN-ZM-2018-606	–	2017.12.26	Ille-et-Vilaine (35)	35800	Saint-Lunaire	48.582	-1.669	Burgot François	Eyes, DNA	–
MNHN-ZM-2017-2891	YA0150	2013.07.01	Ille-et-Vilaine (35)	35400	Saint-Malo	48.649	-2.025	Burgot François	Molars, DNA	KU189480
MNHN-ZM-2017-2892	YA0151	2013.07.01	Ille-et-Vilaine (35)	35400	Saint-Malo	48.649	-2.025	Burgot François	Molars, DNA	KU189481
MNHN-ZM-2017-2893	YA0169	2013.07.01	Ille-et-Vilaine (35)	35400	Saint-Malo	48.649	-2.025	Burgot François	Molars, DNA	KU189494
MNHN-ZM-MO-1983-4	–	1959.08.10	Ille-et-Vilaine (35)	35290	Saint-Méen-le-Grand	48.183	-2.200	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-2017-2898	YA0152	2013.07.01	Ille-et-Vilaine (35)	35350	Saint-Méloir-des-Ondes	48.637	-1.903	Burgot François	Molars, DNA	KU189482
MNHN-ZM-2017-2899	YA0153	2013.07.01	Ille-et-Vilaine (35)	35350	Saint-Méloir-des-Ondes	48.637	-1.903	Burgot François	Molars, DNA	KU189483

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Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-MO-2003-485	–	2003.04.27	Indre-et-Loire (37)	37530	Cangey, La garenne de Saint-Thomas	47.466	1.060	Tranier Michel	Eyes, DNA	KU189440
MHNN Z 45169	–	–	Indre-et-Loire (37)	37000	environs de Tours	47.383	0.683	–	Eyes	–
–	–	1905.07.11	Indre-et-Loire (37)	37700	La Ville-aux-Dames, île de la métairie	47.403	0.769	Etude GREGE - Christine Fournier-Chambrillon	DNA	–
MNHN-ZM-MO-1984-785	–	1905.03.11	Indre-et-Loire (37)	–	unknown	unknown	unknown	–	Eyes	–
–	FRA2	–	Isère (38)	38000	Grenoble	45.170	5.720	–	DNA	KF801514
–	FRA3	–	Isère (38)	38000	Grenoble	45.170	5.720	–	DNA	KF801515
MHNGr 0s-1860	–	1975.05.17	Isère (38)	38510	Mépieu	45.750	5.450	Noblet J.F.	Molars	–
MHNGr 0s-1857	–	End XXeme	Isère (38)	38380	Saint-Pierre-de-Chartreuse, couvent grande chartreuse	45.348	5.791	Noblet J.F.	Molars, DNA	–
–	FRA1	–	Isère (38)	–	Trieves	44.800	5.666	–	DNA	FN640550
MNHN-ZM-MO-1983-661	–	1967.12.31	Isère (38)	–	Vercors	45.105	5.523	Brosset André	Eyes	–
MNHN-ZM-MO-1993-629	–	–	Isère (38)	–	Vercors	45.105	5.523	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-630	–	–	Isère (38)	–	Vercors	45.105	5.523	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-2017-2900	YA0332	2013.09.17	Isère (38)	38280	Villette-d'Anthon	45.779	5.122	Moncel Gwendoline	Molars, DNA	KU189564
MNHN-ZM-2017-2901	YA0334	2013.10.10	Isère (38)	38280	Villette-d'Anthon	45.779	5.122	Moncel Gwendoline	Molars, DNA	KU189565
MNHN-ZM-MO-1961-966	–	1961.08.06	Loire (42)	42370	Saint-Haon-le-Châtel	46.066	3.916	Bourlière Fr.	Molars	–
MNHN-ZM-MO-1986-101	–	–	Loire-Atlantique (44)	–	DeLisle ?	unknown	unknown	–	Molars	–
MNHN-ZM-MO-1993-615	–	1963.04.11	Loire-Atlantique (44)	44390	Puceul	47.516	-1.616	Saint Girons Marie-Charlotte	Molars	–
MHNN Z 25056	–	1948.12.14	Loire-Atlantique (44)	44980	Sainte-Luce-sur-Loire	47.25 0	-1.5 00	–	Molars, DNA	–
MNHN-ZM-2021-1409	VN1922	2008.09.21	Loiret (45)	45430	Chécy (bord du canal)	47.900	2.017	Centre de soins LPO	Eyes	–
MNHN-ZM-MO-1993-614	–	1962.09.20	Loiret (45)	45320	Courtenay	48.033	3.050	Saint Girons Marie-Charlotte	Molars, DNA	–
MHNN.Z.2011-25-19	–	2009.07.05	Loiret (45)	45620	Isdes	47.666	2.250	–	Eyes, DNA	–
MNHN-ZM-2018-2238	VN1857	2018.05.15	Loir-et-Cher (41)	41500	«le Noyer», Villexanton	47.745	1.456	Houssin Céline	Eyes, DNA	–
MNHN-ZM-MO-1992-636	–	1992.05.10	Loir-et-Cher (41)	41150	Mesland	47.510	1.123	Tranier Michel	Eyes, DNA	KU189431
MNHN-ZM-MO-1942-400	–	1942.10.28	Loir-et-Cher (41)	41250	Neuvy	47.566	1.600	Chanudet Paul	Molars	–
MNHN-ZM-MO-1942-402	–	1942.11.23	Loir-et-Cher (41)	41250	Neuvy	47.566	1.600	Chanudet Paul	Molars	–
NMNH 233837	208	1919.06.12	Loir-et-Cher (41)	41110	Saint-Aignan	47.266	1.383	Harper F.	Molars	–
–	Sassay 1	2019.05.12	Loir-et-Cher (41)	41700	Sassay	47.395	1.442	Gervais Michel	Molars	–
MHNL 40002091	–	–	Loir-et-Cher (41)	–	Sologne, Loir-et-Cher	47.550	1.730	Walter Yves	Eyes	–
MNHN-ZM-2021-1410	VN1894	2019.05.19	Manche (50)	50560	Gouville-sur-mer	49.099	-1.572	Veron Géraldine	Eyes	–
MNHN-ZM-MO-1986-96	–	–	Meurthe-et-Moselle (54)	54370	Buré	48.700	6.583	Heim de Balsac Henri	Molars	–
MNHN-ZM-MO-1986-97	–	–	Meurthe-et-Moselle (54)	54370	Buré	48.700	6.583	Heim de Balsac Henri	Molars	–
Museum Nancy 2016.0.837	–	1956.06.10	Meurthe-et-Moselle (54)	54280	Seichamps	48.716	6.266	–	Eyes	–
MNHN-ZM-MO-1993-680	–	–	Morbihan (56)	56360	Belle-Île	47.333	-3.186	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-681	–	–	Morbihan (56)	56360	Belle-Île	47.333	-3.186	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-MO-1993-682	–	–	Morbihan (56)	56360	Belle-Île	47.333	-3.186	Saint Girons Marie-Charlotte	Molars	–
MNHN-ZM-2017-2902	YA0146	2013.06.01	Morbihan (56)	56130	Férel	47.482	-2.342	Dupont Yves	Molars, DNA	KU189476
MNHN-ZM-2017-2903	YA0144	2013.06.01	Morbihan (56)	56780	Isle-aux-Moines	47.597	-2.843	Dupont Yves	Molars, DNA	KU189474
MNHN-ZM-2017-2904	YA0148	2013.06.01	Morbihan (56)	56260	Larmor	47.574	-2.195	Dupont Yves	Molars, DNA	KU189478
MNHN-ZM-2017-2905	YA0139	2013.06.01	Morbihan (56)	56190	Muzillac	47.553	-2.482	Dupont Yves	Molars, DNA	KU189470
MNHN-ZM-2017-2906	YA0140	2013.06.01	Morbihan (56)	56190	Muzillac	47.553	-2.482	Dupont Yves	Molars, DNA	KU189471
MNHN-ZM-2017-2907	YA0141	2013.06.01	Morbihan (56)	56190	Muzillac	47.553	-2.482	Dupont Yves	Molars, DNA	KU189472
–	YA0142	2013.06.01	Morbihan (56)	56190	Muzillac	47.553	-2.482	Dupont Yves	Molars, DNA	KU189473

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Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-2017-2908	YA0143	2013.06.01	Morbihan (56)	56190	Muzillac	47.553	-2.482	Dupont Yves	Molars	–
MNHN-ZM-2017-2909	YA0145	2013.06.01	Morbihan (56)	56190	Muzillac	47.553	-2.482	Dupont Yves	Molars, DNA	KU189475
MNHN-ZM-2017-2910	YA0147	2013.06.01	Morbihan (56)	56190	Muzillac	47.553	-2.482	Dupont Yves	Molars, DNA	KU189477
MNHN-ZM-2017-2911	YA0149	2013.06.01	Morbihan (56)	56190	Noyal-Muzillac	47.592	-2.457	Dupont Yves	Molars, DNA	KU189479
MNHN-ZM-2017-2912	YA0387	–	Morbihan (56)	56680	Plouhinec	47.698	-3.274	Deputte Bertrand	Molars	–
MNHN-ZM-2013-155	YA0009	2012.04.13	Morbihan (56)	56680	Plouhinec	47.698	-3.274	Deputte Bertrand	Eyes	–
BMNH 21.7.4.7	–	1915.12.15	Nord (59)	59280	Armentières, Fort Rompu	50.683	2.883	–	Molars	–
MNHN-ZM-MO-1993-4222	–	–	Nord (59)	59188	Villers-en-Cauchis	50.226	3.401	Komerovsky Isabelle	Eyes, DNA	KU189432
MNHN-ZM-MO-1993-4222	–	1993.08.05	Nord (59)	59188	Villers-en-Cauchis	50.226	3.401	Komerovsky Isabelle	Eyes	–
MNHN-ZM-2017-2913	YA0087	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars, DNA	KU189463
MNHN-ZM-2017-2914	YA0088	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars, DNA	KU189464
MNHN-ZM-2017-2915	YA0089	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars, DNA	KU189465
–	YA0090	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars, DNA	KU189466
MNHN-ZM-2017-2916	YA0091	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2917	YA0092	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars, DNA	KU189467
MNHN-ZM-2017-2918	YA0093	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars, DNA	KU189468
MNHN-ZM-2017-2919	YA0094	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Mandibles	–
MNHN-ZM-2017-2920	YA0095	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2921	YA0096	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2922	YA0097	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Mandibles	–
MNHN-ZM-2017-2923	YA0098	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2924	YA0099	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2925	YA0100	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2926	YA0101	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2927	YA0102	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2928	YA0103	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2929	YA0104	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2930	YA0105	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2931	YA0106	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2932	YA0107	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2933	YA0108	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2934	YA0109	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2935	YA0110	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2936	YA0111	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2937	YA0112	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2938	YA0113	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2939	YA0114	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Mandibles	–
MNHN-ZM-2017-2940	YA0115	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
MNHN-ZM-2017-2941	YA0116	2013.03.15	Oise (60)	60000	Beauvais	49.452	2.058	Dormion Jérôme	Molars	–
–	YA0054	2012.10.18	Oise (60)	60141	Chantilly	49.193	2.468	Dormion Jérôme	DNA	KU189458
MNHN-ZM-2018-2251	–	2018.05.16	Oise (60)	60510	La Neuville-en-Hez	49.408	2.327	de Massary Jean-Christophe (via Haffner Patrick)	Eyes	–
MNHN-ZM-2017-2942	YA0187	2013.08.07	Oise (60)	60128	Plailly	49.103	2.586	Dormion Jérôme	Molars, DNA	KU189502
MNHN-ZM-2017-2943	YA0188	2013.08.07	Oise (60)	60128	Plailly	49.103	2.586	Dormion Jérôme	Molars, DNA	KU189503
MNHN-ZM-AC-2000-362	–	–	Oise (60)	–	unknown	unknown	unknown	–	Molars	–
MNHN-ZM-2014-854	VN1790	–	Paris (75)	75012	Bois de Vincennes	48.816	2.416	Geigl Eva-Maria	Eyes, DNA	KU189441
MNHN-ZM-2017-2944	YA0284	2013.07.29	Pas-de-Calais (62)	62810	Barly	50.250	2.547	Cairey-Remonnay Frédéric	Mandibles, DNA	KU189541
–	YA0285	2013.07.29	Pas-de-Calais (62)	62810	Barly	50.250	2.547	Cairey-Remonnay Frédéric	Molars, DNA	KU189542

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MNHN-ZM-2017-2945	YA0286	2013.07.29	Pas-de-Calais (62)	62810	Barly	50.250	2.547	Cairey-Remonnay Frédéric	Mandibles, DNA	KU189543
MNHN-ZM-2017-2946	YA0287	2013.07.29	Pas-de-Calais (62)	62810	Barly	50.250	2.547	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2947	YA0317	2013.06.27	Pas-de-Calais (62)	62142	Belle-et-Houllefort	50.745	1.759	Cairey-Remonnay Frédéric	Molars, DNA	KU189555
MNHN-ZM-2017-2948	YA0318	2013.06.27	Pas-de-Calais (62)	62142	Belle-et-Houllefort	50.745	1.759	Cairey-Remonnay Frédéric	Molars, DNA	KU189556
MNHN-ZM-2017-2949	YA0319	2013.06.27	Pas-de-Calais (62)	62142	Belle-et-Houllefort	50.745	1.759	Cairey-Remonnay Frédéric	Molars, DNA	KU189557
MNHN-ZM-2017-2950	YA0309	2013.06.10	Pas-de-Calais (62)	62340	Bonningues-lès-Calais	50.889	1.773	Cairey-Remonnay Frédéric	Molars, DNA	KU189549
MNHN-ZM-2017-2951	YA0310	2013.06.10	Pas-de-Calais (62)	62340	Bonningues-lès-Calais	50.889	1.773	Cairey-Remonnay Frédéric	Molars, DNA	KU189550
BMNH 64.270	–	1963.08.23	Pas-de-Calais (62)	–	Cap Gris-Nez	50.866	1.583	–	Molars	–
BMNH 64.271	–	1963.08.27	Pas-de-Calais (62)	–	Cap Gris-Nez	50.866	1.583	–	Molars	–
BMNH 64.272	–	1963.08.30	Pas-de-Calais (62)	–	Cap Gris-Nez	50.866	1.583	–	Molars	–
BMNH 64.273	–	1963.09.02	Pas-de-Calais (62)	–	Cap Gris-Nez	50.866	1.583	–	Molars	–
BMNH 67.281	–	1964.07.25	Pas-de-Calais (62)	–	Cap Gris-Nez	50.866	1.583	–	Molars	–
BMNH 67.282	–	1964.07.27	Pas-de-Calais (62)	–	Cap Gris-Nez	50.866	1.583	–	Molars	–
BMNH 67.284	–	1964.07.30	Pas-de-Calais (62)	–	Cap Gris-Nez	50.866	1.583	–	Molars	–
BMNH 67.285	–	1964.07.30	Pas-de-Calais (62)	–	Cap Gris-Nez	50.866	1.583	–	Molars	–
MNHN-ZM-2016-476	YA0296	2013.08.13	Pas-de-Calais (62)	62132	Fienne	50.800	1.829	Cairey-Remonnay Frédéric	Molars, DNA	KU189545
MNHN-ZM-2017-2952	YA0297	2013.08.13	Pas-de-Calais (62)	62132	Fienne	50.800	1.829	Cairey-Remonnay Frédéric	Molars, DNA	KU189546
MNHN-ZM-2017-2953	YA0298	2013.08.13	Pas-de-Calais (62)	62132	Fienne	50.800	1.829	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2954	YA0299	2013.09.16	Pas-de-Calais (62)	62132	Fienne	50.800	1.829	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2955	YA0268	2013.08.02	Pas-de-Calais (62)	62182	Hendecourt-les-Cagnicourt	50.209	2.948	Cairey-Remonnay Frédéric	Molars, DNA	–
MNHN-ZM-2017-2956	YA0269	2013.08.02	Pas-de-Calais (62)	62182	Hendecourt-les-Cagnicourt	50.209	2.948	Cairey-Remonnay Frédéric	Mandibles	–
MNHN-ZM-2017-2957	YA0270	2013.08.02	Pas-de-Calais (62)	62182	Hendecourt-les-Cagnicourt	50.209	2.948	Cairey-Remonnay Frédéric	Mandibles, DNA	–
MNHN-ZM-2017-2958	YA0288	2013.07.30	Pas-de-Calais (62)	62182	Hendecourt-les-Cagnicourt	50.209	2.948	Cairey-Remonnay Frédéric	Molars	–
–	YA0289	2013.07.30	Pas-de-Calais (62)	62182	Hendecourt-les-Cagnicourt	50.209	2.948	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2959	YA0290	2013.07.30	Pas-de-Calais (62)	62182	Hendecourt-les-Cagnicourt	50.209	2.948	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2960	YA0291	2013.07.30	Pas-de-Calais (62)	62182	Hendecourt-les-Cagnicourt	50.209	2.948	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2961	YA0293	2013.08.02	Pas-de-Calais (62)	62182	Hendecourt-les-Cagnicourt	50.209	2.948	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2962	YA0294	2013.08.02	Pas-de-Calais (62)	62182	Hendecourt-les-Cagnicourt	50.209	2.948	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2963	YA0295	2013.08.02	Pas-de-Calais (62)	62182	Hendecourt-les-Cagnicourt	50.209	2.948	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2964	YA0271	2013.06.20	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars, DNA	–
MNHN-ZM-2017-2965	YA0272	2013.06.20	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Mandibles, DNA	–
MNHN-ZM-2017-2966	YA0273	2013.06.20	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Mandibles, DNA	–
MNHN-ZM-2017-2967	YA0274	2013.06.20	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2968	YA0275	2013.06.20	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2969	YA0276	2013.06.20	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2970	YA0277	2013.06.20	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2971	YA0278	2013.06.20	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2972	YA0279	2013.06.27	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2973	YA0280	2013.06.27	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
–	YA0281	2013.06.27	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
–	YA0282	2013.06.27	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2974	YA0283	2013.06.27	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2975	YA0302	2013.06.27	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2976	YA0303	2013.06.27	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2977	YA0304	2013.06.27	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2978	YA0305	2013.06.27	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–

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Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-2017-2979	YA0306	2013.06.27	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2980	YA0307	2013.06.27	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2981	YA0308	2013.06.27	Pas-de-Calais (62)	62630	Hubersent	50.581	1.724	Cairey-Remonnay Frédéric	Mandibles	–
MNHN-ZM-2017-2982	YA0262	2013.09.13	Pas-de-Calais (62)	62720	Rinxent	50.806	1.739	Cairey-Remonnay Frédéric	Molars, DNA	–
MNHN-ZM-2017-2983	YA0263	2013.09.13	Pas-de-Calais (62)	62720	Rinxent	50.806	1.739	Cairey-Remonnay Frédéric	Molars, DNA	–
MNHN-ZM-2017-2984	YA0264	2013.09.13	Pas-de-Calais (62)	62720	Rinxent	50.806	1.739	Cairey-Remonnay Frédéric	Mandibles, DNA	–
MNHN-ZM-2017-2985	YA0265	2013.09.20	Pas-de-Calais (62)	62720	Rinxent	50.806	1.739	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2986	YA0266	2013.09.20	Pas-de-Calais (62)	62720	Rinxent	50.806	1.739	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2987	YA0267	2013.09.20	Pas-de-Calais (62)	62720	Rinxent	50.806	1.739	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2988	YA0312	2013.06.07	Pas-de-Calais (62)	62530	Servins	50.413	2.636	Cairey-Remonnay Frédéric	Molars, DNA	KU189552
MNHN-ZM-2017-2989	YA0313	2013.06.07	Pas-de-Calais (62)	62530	Servins	50.413	2.636	Cairey-Remonnay Frédéric	Molars, DNA	KU189553
MNHN-ZM-2017-2990	YA0314	2013.06.07	Pas-de-Calais (62)	62530	Servins	50.413	2.636	Cairey-Remonnay Frédéric	Molars, DNA	KU189554
MNHN-ZM-2017-2991	YA0315	2013.06.07	Pas-de-Calais (62)	62530	Servins	50.413	2.636	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2992	YA0316	2013.06.07	Pas-de-Calais (62)	62530	Servins	50.413	2.636	Cairey-Remonnay Frédéric	Molars	–
MNHN-ZM-2017-2993	YA0292	2013.07.31	Pas-de-Calais (62)	62180	Tigny-Noyelle	50.353	1.706	Cairey-Remonnay Frédéric	Molars, DNA	KU189544
MNHN-ZM-2017-2994	YA0300	2013.08.10	Pas-de-Calais (62)	62126	Wimille	50.800	1.829	Cairey-Remonnay Frédéric	Molars, DNA	KU189547
MNHN-ZM-2017-2995	YA0301	2013.08.10	Pas-de-Calais (62)	62126	Wimille	50.800	1.829	Cairey-Remonnay Frédéric	Molars, DNA	KU189548
–	YA0372	–	Pyrénées-Orientales (66)	66500	Mosset	42.669	2.348	Ribas Alexis	DNA	KU189575
–	YA0373	–	Pyrénées-Orientales (66)	66500	Mosset	42.669	2.348	Ribas Alexis	DNA	KU189576
MHNL 40000794	–	1886.10.24	Rhône (69)	69130	Ecully	45.766	4.766	Chantre Ernest	Eyes	–
MHNL 40000786	–	–	Rhône (69)	69000	environs de Lyon	45.750	4.850	–	Eyes	–
MHNL 40002764	–	–	Rhône (69)	69000	environs de Lyon	45.750	4.850	–	Eyes	–
MHNL 40000787	–	1905.03.17	Rhône (69)	69480	Morancé	45.900	4.700	–	Eyes	–
MHNL 40002792	–	1949..	Rhône (69)	69140	Rillieux-la-Pape	45.816	4.900	Gagneux Claudius	Eyes	–
–	YA0189	2013.08.07	Saône-et-Loire (71)	71452	Saint-Martin-de-Salencey	46.521	4.500	Dormion Jérôme	Molars, DNA	KU189504
MNHN-ZM-2017-2996	YA0220	2013.09.24	Seine-et-Marne (77)	77058	Bussy-Saint-Georges	48.842	2.698	Dormion Jérôme	Molars, DNA	KU189522
MNHN-ZM-2017-2997	YA0190	2013.08.07	Seine-et-Marne (77)	77650	Chalmaison	48.483	3.251	Dormion Jérôme	Molars, DNA	KU189505
MNHN-ZM-MO-1959-1796	–	1959.06.07	Seine-et-Marne (77)	77170	Coubert	48.666	2.700	Pujol Raymond	Molars	–
MNHN-ZM-MO-1959-1797	–	1959.06.07	Seine-et-Marne (77)	77170	Coubert	48.666	2.700	Pujol Raymond	Molars	–
MNHN-ZM-MO-1961-743	–	1960.06.	Seine-et-Marne (77)	77170	Coubert	48.666	2.700	Pujol Raymond	Molars	–
MNHN-ZM-2013-157	YA0013	2012.06.	Seine-et-Marne (77)	77190	Danmarie-les-Lys	48.515	2.634	Dormion Jérôme	Eyes	–
MNHN-ZM-2017-2998	YA0191	2013.08.07	Seine-et-Marne (77)	77188	Fontaine-le-Port	48.485	2.759	Dormion Jérôme	Molars, DNA	KU189506
MNHN-ZM-2017-2999	YA0192	2013.08.07	Seine-et-Marne (77)	77188	Fontaine-le-Port	48.485	2.759	Dormion Jérôme	Molars, DNA	KU189507
MNHN-ZM-2017-3000	YA0193	2013.08.07	Seine-et-Marne (77)	77188	Fontaine-le-Port	48.485	2.759	Dormion Jérôme	Molars, DNA	KU189508
MNHN-ZM-MO-2001-2084	–	1986.08.	Seine-et-Marne (77)	77166	Grisy-Suisnes, La petite Gray	48.683	2.666	Pujol Raymond	Eyes	–
MNHN-ZM-MO-1967-1429	–	1966.03.16	Seine-et-Marne (77)	77400	Lagny-sur-Marne	48.866	2.716	Petter Francis	Molars	–
MNHN-ZM-MO-1967-1431	–	1966.06.12	Seine-et-Marne (77)	77400	Lagny-sur-Marne	48.866	2.716	Petter Francis	Molars	–
MNHN-ZM-2017-3001	YA0194	2013.08.07	Seine-et-Marne (77)	77249	Lesigny	48.743	2.614	Dormion Jérôme	Molars	–
MNHN-ZM-MO-1933-2056	–	–	Seine-et-Marne (77)	77000	Melun	48.533	2.666	Mottaz Charles	Molars	–
–	YA0018	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0019	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189443
–	YA0020	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0021	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189444
–	YA0022	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0023	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–

APPENDIX 2. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
–	YA0024	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0025	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0026	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0027	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189445
–	YA0028	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189446
–	YA0029	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189447
–	YA0030	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189448
–	YA0031	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0032	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189449
–	YA0033	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0034	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189450
–	YA0035	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0036	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189451
–	YA0037	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189452
–	YA0038	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189453
–	YA0039	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0040	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189454
–	YA0041	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0042	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189455
–	YA0043	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189456
–	YA0044	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	DNA	KU189457
–	YA0045	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0046	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0047	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0048	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0049	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0050	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0051	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0052	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0053	2012.10.18	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0059	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0060	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0061	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0062	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0063	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0064	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0065	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0066	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0067	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0068	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0069	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0070	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0071	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0072	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0073	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0074	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0075	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0076	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0077	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0078	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–

APPENDIX 2. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
–	YA0079	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0080	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0081	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0082	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0083	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0084	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0085	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Eyes	–
–	YA0086	2013.02.21	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3002	YA0234	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3003	YA0235	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3004	YA0236	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3005	YA0237	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3006	YA0238	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3007	YA0239	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3008	YA0240	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3009	YA0241	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3010	YA0242	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3011	YA0243	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3012	YA0244	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3013	YA0245	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3014	YA0246	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3015	YA0247	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3016	YA0248	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3017	YA0249	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3018	YA0250	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3019	YA0251	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3020	YA0252	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3021	YA0253	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3022	YA0254	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3023	YA0255	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3024	YA0256	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3025	YA0257	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
–	YA0258	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3026	YA0259	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Mandibles	–
MNHN-ZM-2017-3027	YA0260	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3028	YA0261	2013.09.24	Seine-et-Marne (77)	77330	Ozoir-la-Ferrière	48.763	2.671	Dormion Jérôme	Molars	–
Museum Bourges 11.Tal.3	–	1905.03.20	Seine-Maritime (76)	76210	Bolbec	49.566	0.483	–	Eyes, DNA	–
MNHN-ZM-MO-1998-400	–	1998.08.18	Somme (80)	80310	Le Mesge	49.945	2.053	Tranier Michel	Eyes	–
MNHN-ZM-2017-3029	YA0311	2013.06.24	Somme (80)	80120	Nampont-Saint-Martin	50.350	1.743	Cairey-Remonnay Frédéric	Molars, DNA	KU189551
MNHN-ZM-2017-3030	YA0233	2013.09.24	Somme (80)	80680	Rumigny	49.808	2.279	Dormion Jérôme	Molars, DNA	KU189532
MHNL 50002702	–	1990..	unknown	–	unknown	unknown	unknown	–	Molars	–
MHNT OST 2002-93	–	–	unknown	–	unknown	unknown	unknown	–	Molars	–
MNHN-ZM-MO-1932-3813	–	1908.10.28	unknown	–	unknown	unknown	unknown	Mottaz Charles	Molars	–
MNHN-ZM-MO-1932-3815	–	1908.10.28	unknown	–	unknown	unknown	unknown	Mottaz Charles	Molars	–
MNHN-ZM-MO-1932-3817	–	1908.10.28	unknown	–	unknown	unknown	unknown	Mottaz Charles	Molars	–
MNHN-ZM-MO-1932-3820	–	1908.10.28	unknown	–	unknown	unknown	unknown	Mottaz Charles	Molars	–
MNHN-ZM-MO-1932-3826	–	1908.10.28	unknown	–	unknown	unknown	unknown	Mottaz Charles	Molars	–
MNHN-ZM-MO-1932-3853	–	1908.10.	unknown	–	unknown	unknown	unknown	Mottaz Charles	Molars	–
MNHN-ZM-MO-1962-2039	–	–	unknown	–	unknown	unknown	unknown	Cantuel Paul	Molars	–
MNHN-ZM-MO-1962-2040	–	–	unknown	–	unknown	unknown	unknown	Cantuel Paul	Molars	–

Appendix 2. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-MO-1962-2041	–	–	unknown	–	unknown	unknown	unknown	Cantuel Paul	Molars	–
MNHN-ZM-MO-1962-2042	–	–	unknown	–	unknown	unknown	unknown	Cantuel Paul	Molars	–
MNHN-ZM-MO-1962-2043	–	–	unknown	–	unknown	unknown	unknown	Cantuel Paul	Molars	–
MNHN-ZM-MO-1962-2045	–	–	unknown	–	unknown	unknown	unknown	Cantuel Paul	Molars	–
MNHN-ZM-MO-1962-2046	–	–	unknown	–	unknown	unknown	unknown	Cantuel Paul	Molars	–
MNHN-ZM-MO-1962-2047	–	–	unknown	–	unknown	unknown	unknown	Cantuel Paul	Molars	–
MNHN-ZM-MO-1962-2048	–	1908.10.01	unknown	–	unknown	unknown	unknown	Cantuel Paul	Molars	–
MNHN-ZM-MO-1962-2049	–	–	unknown	–	unknown	unknown	unknown	Cantuel Paul	Molars	–
MNHN-ZM-MO-2003-134	–	–	unknown	–	unknown	unknown	unknown	Molez Gaëtan	Molars	–
MNHN-ZM-MO-2003-135	–	–	unknown	–	unknown	unknown	unknown	Molez Gaëtan	Molars	–
MHNL 50002701	–	1990..	unknown	–	unknown	unknown	unknown	–	Molars, DNA	–
MHNL 50002703	–	1990..	unknown	–	unknown	unknown	unknown	–	Molars, DNA	–
MHNL 50002705	–	1990..	unknown	–	unknown	unknown	unknown	–	Molars, DNA	–
MHNL 50002706	–	1990..	unknown	–	unknown	unknown	unknown	–	Molars, DNA	–
MNHN-ZM-MO-1944-8	–	–	Val-de-Marne (94)	94300	Vincennes	48.847	2.439	Terry	Molars	–
MNHN-ZM-MO-1954-294	–	1954.02.	Val-d'Oise (95)	95560	Montsoult, Ferme du Grand Fournay	49.066	2.316	Caillé Pierre	Molars	–
MNHN-ZM-2017-3031	YA0226	2013.09.24	Val-d'Oise (95)	95491	Plessis-Bouchard	49.003	2.234	Dormion Jérôme	Molars, DNA	KU189527
MNHN-ZM-2017-3032	YA0227	2013.09.24	Val-d'Oise (95)	95491	Plessis-Bouchard	49.003	2.234	Dormion Jérôme	Molars, DNA	KU189528
MNHN-ZM-2017-3033	YA0228	2013.09.24	Val-d'Oise (95)	95491	Plessis-Bouchard	49.003	2.234	Dormion Jérôme	Molars, DNA	KU189529
MNHN-ZM-2017-3034	YA0229	2013.09.24	Val-d'Oise (95)	95491	Plessis-Bouchard	49.003	2.234	Dormion Jérôme	Molars	–
MNHN-ZM-2021-1411	VN1869	–	Var (83)	83610	Collobrières	43.238	6.309	–	Eyes	–
MNHN SPOT11165	–	–	Yonne (89)	89320	Cerisiers	48.134	3.485	–	DNA	KF801513
MNHN SPOT6868	–	–	Yonne (89)	89500	Dixmont	48.080	3.410	–	DNA	KF801512
MNHN-ZM-MO-1993-4223	–	1993.07.19	Yonne (89)	89350	Louesme	47.766	3.133	Komerovsky Isabelle	Eyes, DNA	KU189435
MNHN-ZM-MO-1992-1406	–	–	Yonne (89)	89240	Semilly-Escamps	47.730	3.474	Komerovsky Isabelle	Eyes, DNA	KU189429
MNHN-ZM-2013-156	YA0012	2012.06.	Yvelines (78)	78170	La Celle-Saint-Cloud	48.849	2.132	Dormion Jérôme	Eyes	–
MNHN-ZM-2017-3035	YA0198	2013.08.07	Yvelines (78)	78113	La Hauteville	48.704	1.625	Dormion Jérôme	Molars, DNA	KU189512
MNHN-ZM-2017-3036	YA0199	2013.08.07	Yvelines (78)	78113	La Hauteville	48.704	1.625	Dormion Jérôme	Molars, DNA	KU189513
MNHN-ZM-2017-3037	YA0200	2013.08.07	Yvelines (78)	78113	La Hauteville	48.704	1.625	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3038	YA0201	2013.08.07	Yvelines (78)	78113	La Hauteville	48.704	1.625	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3039	YA0202	2013.08.07	Yvelines (78)	78113	La Hauteville	48.704	1.625	Dormion Jérôme	Molars, DNA	KU189514
MNHN-ZM-2017-3040	YA0203	2013.08.07	Yvelines (78)	78113	La Hauteville	48.704	1.625	Dormion Jérôme	Molars, DNA	KU189515
MNHN-ZM-2017-3041	YA0205	2013.08.07	Yvelines (78)	78610	Les Bréviaires	48.707	1.814	Dormion Jérôme	Molars, DNA	KU189517
MNHN-ZM-2017-3042	YA0195	2013.08.07	Yvelines (78)	78372	Marly-le-Roy	48.868	2.097	Dormion Jérôme	Molars, DNA	KU189509
MNHN-ZM-2017-3043	YA0230	2013.09.24	Yvelines (78)	78372	Marly-le-Roy	48.868	2.097	Dormion Jérôme	Molars, DNA	KU189530
MNHN-ZM-2017-3044	YA0231	2013.09.24	Yvelines (78)	78372	Marly-le-Roy	48.868	2.097	Dormion Jérôme	Molars, DNA	KU189531
MNHN-ZM-2017-3045	YA0232	2013.09.24	Yvelines (78)	78372	Marly-le-Roy	48.868	2.097	Dormion Jérôme	Molars	–
MNHN-ZM-2017-3046	YA0204	2013.08.07	Yvelines (78)	78490	Montfort L'Amaury	48.772	1.815	Dormion Jérôme	Molars, DNA	KU189516
MNHN-ZM-MO-1960-3764	–	1951.05.	Yvelines (78)	78490	Montfort l'Amaury	48.783	1.816	–	Molars	–
MNHN-ZM-MO-1959-1773	–	1959.10.26	Yvelines (78)	78120	Rambouillet	48.650	1.833	–	Molars	–
–	YA0432	2014.01.28	Yvelines (78)	78730	Saint-Arnoult-en-Yvelines	48.572	1.941	Dormion Jérôme	DNA	KU189577
–	YA0433	2014.01.28	Yvelines (78)	78730	Saint-Arnoult-en-Yvelines	48.572	1.941	Dormion Jérôme	DNA	KU189578
–	YA0056	2012.10.18	Yvelines (78)	78470	Saint-Rémy-lès-Chevreuse	48.702	2.069	Dormion Jérôme	DNA	KU189460
–	YA0196	2013.08.07	Yvelines (78)	78646	Versailles	48.804	2.121	Dormion Jérôme	Molars, DNA	KU189510
MNHN-ZM-2017-3047	YA0197	2013.08.07	Yvelines (78)	78646	Versailles	48.804	2.121	Dormion Jérôme	Molars, DNA	KU189511
MNHN-ZM-2017-3167	–	2017.08.21	Ain (01)	01290	Grièges	46.255	4.851	–	Eyes, DNA	–
MNHN-ZM-2017-3166	–	2017.10.09	Ain (01)	01140	Saint-Didier-sur-Charlonne	46.178	4.817	Hugot Jean-Pierre	Eyes, DNA	–
NMNH 233828	19	1919.04.20	Côtes d'or (21)	21120	Is-sur-Tille	47.516	5.100	Plummer A. B.	Molars	–

Appendix 2. — Continuation.

Museum Number	Field Nb	Date	Departement	Post.	Town	Lat.	Long.	Collector	Identification	Genbank
MNHN-ZM-2017-3173	–	2017.02.01	Eure (27)	27130	Verneuil-sur-Avre, Les Barils (golf du Center Park)	48.728	0.840	Nicolas Violaine	Eyes, DNA	–
MNHN-ZM-2017-3170	–	2017.09.01	Hautes-Alpes (05)	05320	La Grave	45.046	6.306	–	Eyes, DNA	–
MNHN-ZM-2017-3171	–	2017.09.01	Hautes-Alpes (05)	05320	La Grave, les Rivets, Chazelet	45.046	6.306	–	Eyes, DNA	–
MNHN-ZM-2017-3169	–	2017.09.01	Hautes-Alpes (05)	05480	Villar d'Arène	45.043	6.337	–	Eyes, DNA	–
NMNH 233832	3	1919.03.18	Loire-Atlantique (44)	44550	Montoir, 6 Mi NE of Saint Nazaire (rive nord de l'estuaire de la Loire)	47.333	-2.150	Crick J. G.	Molars	–
MNHN-ZM-2017-2283	–	2016.07.17	Loiret (45)	45220	Château-Renard, Les Marchaisons	47.915	2.903	Pons Jean-Marc	Eyes, DNA	–
MNHN-ZM-2017-3168	–	2017.08.22	Rhône (69)	69380	Châtillon-d'Azergues	45.878	4.646	–	Eyes, DNA	–
MNHN SPOT15269	–	2020.09.29	Val-d'Oise (95)	95550	Bessancourt (162 Grande Rue)	49.039	2.220	de Jong Justine	DNA	–