

Article

Update on the situation of *Donacia springeri* Müller, 1916 in metropolitan France (Coleoptera, Chrysomelidae, Donaciinae)

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ABSTRACT

There exist very few data on *Donacia springeri* in metropolitan France. The oldest records date back to the 1920s and 1930s and come from Isère and Savoie (Auvergne-Rhône-Alpes region). It is only in 2006 that the species was observed again on French territory in the Haute-Saône department (Bourgogne-Franche-Comté region). Since then, the species has been collected several times in this department in 2010 and 2025.

Keywords: distribution, phenology, peat bog, peat pond, Haute-Saône, Franche-Comté, Reed Beetles.

Point sur la situation de *Donacia springeri* Müller, 1916 en France métropolitaine (Coleoptera, Chrysomelidae, Donaciinae)

RÉSUMÉ

Il existe très peu de données de *Donacia springeri* en France métropolitaine. Les plus anciennes datent des années 1920-1930 et proviennent de l'Isère et de la Savoie (région Auvergne-Rhône-Alpes). Ce n'est qu'en 2006 que l'espèce est de nouveau observée sur le territoire français dans le département de Haute-Saône (région Bourgogne-Franche-Comté). Depuis, l'espèce a été collectée à plusieurs reprises dans ce département en 2010 et 2025.

Mots-clés : répartition, phénologie, tourbière, étang tourbeux, Haute-Saône, Franche-Comté, donacies.



Photo 1. Location where *Donacia springeri* was observed in 2025 in the municipality of La Voivre (Haute-Saône).

Photo 1. Station où *Donacia springeri* a été observée en 2025 sur la commune de La Voivre (Haute-Saône).

1. Introduction

Donacia springeri Müller, 1916 is a species from the western Palearctic region known from fewer than ten countries. From west to east, it is present or has been reported in France (LAYS 2002), Switzerland (HERGER 2007), Italy (MÜLLER 1916, RAVIZZA 1973), Germany (BOLLOW 1940), Austria (KIPPENBERG 1966, HEISS 1971, BROJER et al. 2014), Czech Republic (MLEJNEK 2023), Sweden (LJUNGBERG 2013, PRÜTZ 2013) and Latvia (TELNOV et al. 2011). However, the species appears to have disappeared from the Czech Republic (HEJDA et al. 2017). Furthermore, in several of these countries, the number of known locations is very limited. In Switzerland, for example, it is only mentioned at two locations

despite extensive research carried out over several years, particularly in the context of compiling a commented list of the country's species (Christian Monnerat pers. comm.). This Reed Beetle is therefore considered one of the rarest in Europe (MLEJNEK 2023). It is found in peat bogs, peat ponds and the edges of well-vegetated lakes. Adults feed on pollen from *Schoenoplectus lacustris* (L.) Palla, 1888 and various *Carex* species (BROJER et al. 2014) including *Carex elata* All., 1785 (RAVIZZA 1973) while the larvae are associated with various *Carex* species, including *Carex nigra* (L.) Reichard, 1778 (MLEJNEK 2023) and *C. elata* (LJUNGBERG 2013).

Department	Municipality (INSEE code)	Date	Comments
Isère	Sassenage (38474)	10-V-1921	1 ♀ in the collections of the Royal Belgian Institute of Natural Sciences (LAYS 2002)
		6-V-1922	3 ♂ and 3 ♀ in the collections of the Royal Belgian Institute of Natural Sciences (LAYS 2002)
		Undated but probably collected in the 1920s	5 ♂ in the collections of the Royal Belgian Institute of Natural Sciences (LAYS 2002)
Savoie	Avressieux (73025)	Undated but probably collected in the 1920s-1930s	1 ♂ and 2 ♀ in the collections of the Royal Belgian Institute of Natural Sciences (LAYS 2002)
Haute-Saône	Esboz-Brest (70216)	6-V-2006	1 ♂ captured by Charles Dheurle and kept in his collection
	Écromagny (70210)	26-V-2010	1 ♂ captured by Claude Warnotte and deposited in the Bernard Bordy collection held by the CBNFC-ORI
		Between 23 and 29-V-2010	1 ♂ et 2 ♀ captured by Claude Warnotte and deposited in the Bernard Bordy collection held by the CBNFC-ORI
	La Voivre (70573)	22-V-2025	1 ♂ collected and deposited in the collection of the first author

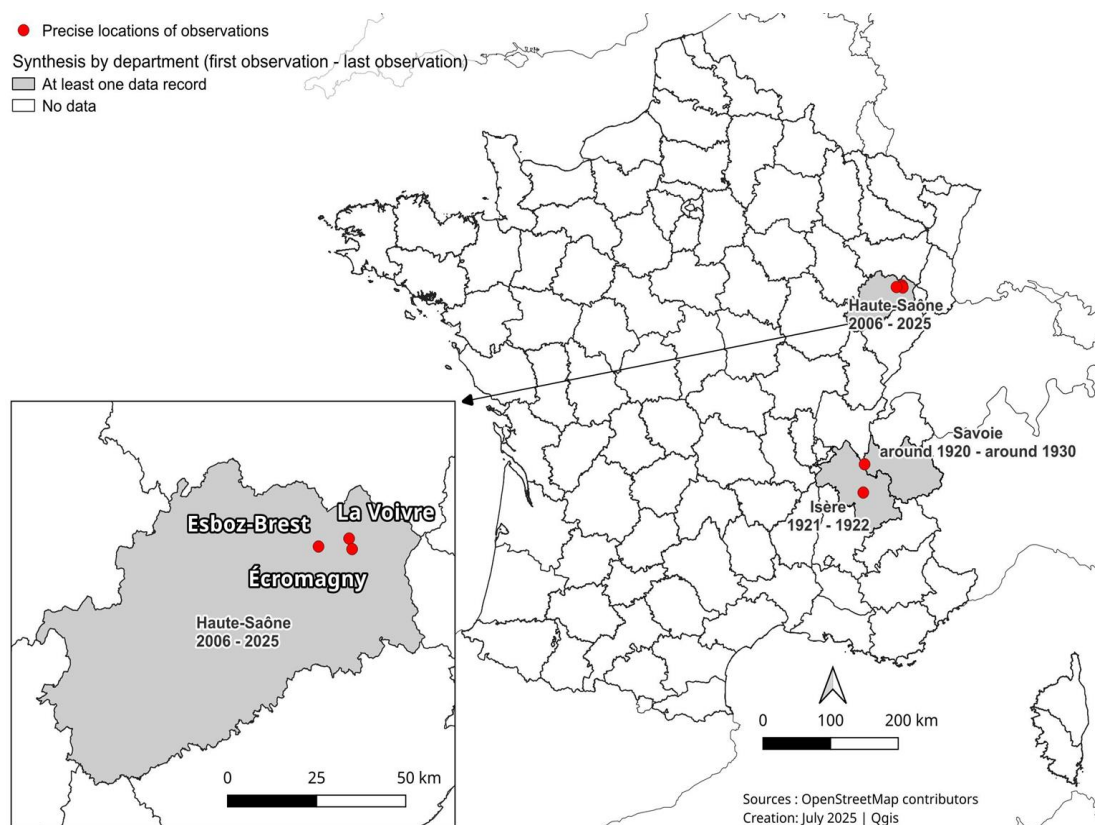
Table I. Summary of observations of *Donacia springeri* in metropolitan France.Tableau I. Synthèse des observations de *Donacia springeri* en France métropolitaine.Map 1. Data on *Donacia springeri* in metropolitan France.Carte 1. Données de *Donacia springeri* en France métropolitaine.



Figure 1. Specimens of *Donacia springeri* collected by Claude Warnotte and deposited in the Bordy collection.

Figure 1. Individus de *Donacia springeri* collectés par Claude Warnotte et déposés dans la collection Bordy.

2. Historical and recent data

In France, the earliest data on the species date back to the 1920s and 1930s, with individuals collected in 1921 and 1922 in Isère in the municipality of Sassenage (Table 1). During the same period, individuals were also collected in the department of Savoie in the municipality of Avressieux (LAYS 2002).

Despite extensive surveys carried out in Franche-Comté by Bernard Bordy on Donaciinae between the mid-1960s and the early 1980s, *D. springeri* was not found (BORDY 1983). His continued research until the early 2000s also failed to detect this species, which remained unknown in the region at that time. It took more than 80 years after the first mentions in Isère and Savoie for the species to be found again on French territory, with its discovery in the Haute-Saône department in 2006 by Charles Dheurle in the commune of Esboz-Brest (altitude 297 m). Four years later, Claude Warnotte observed it a few kilometers away, in the commune of Écromagny (altitude 444 m) (Fig. 1). Finally, in 2025, the first author captured *D. springeri* in the neighbouring commune of La Voivre (altitude 461 m) (Photo 1 and Fig. 2).

Table 1 and Map I summarise all valid data available for metropolitan France.

Note: on the National Inventory of Natural Heritage (INPN) portal, the species is mentioned in the department of Corrèze (Nouvelle-Aquitaine region), in the commune of Montaignac-sur-Doustre, with a recent observation dating from 2020. However, this observation should be considered doubtful until it has been verified (Laurent Chabrol pers. comm.).

3. Identification and phenology

Identification can be tricky, and confusion is common with *D. obscura* Gyllenhal, 1813, *D. impressa* Paykull, 1799 and *D. thalassina* Germar, 1811 (GEISER & BROJER 2016, MLEJNEK 2023). The best criteria for separating them are the anterior angles of the pronotum (not protruding in *D. springeri*, contrary to the other species) (Figs 2b and 3) but above all the observation of the aedeagus in males (NYHOLM 1950, MOHR 1985) whose median lobe ends in a characteristic narrow, elongated extension (Figs 2c and 3).

The available French data indicate that this is a spring species. Indeed, all adult captures date from May (between 6 and 29 May). In other

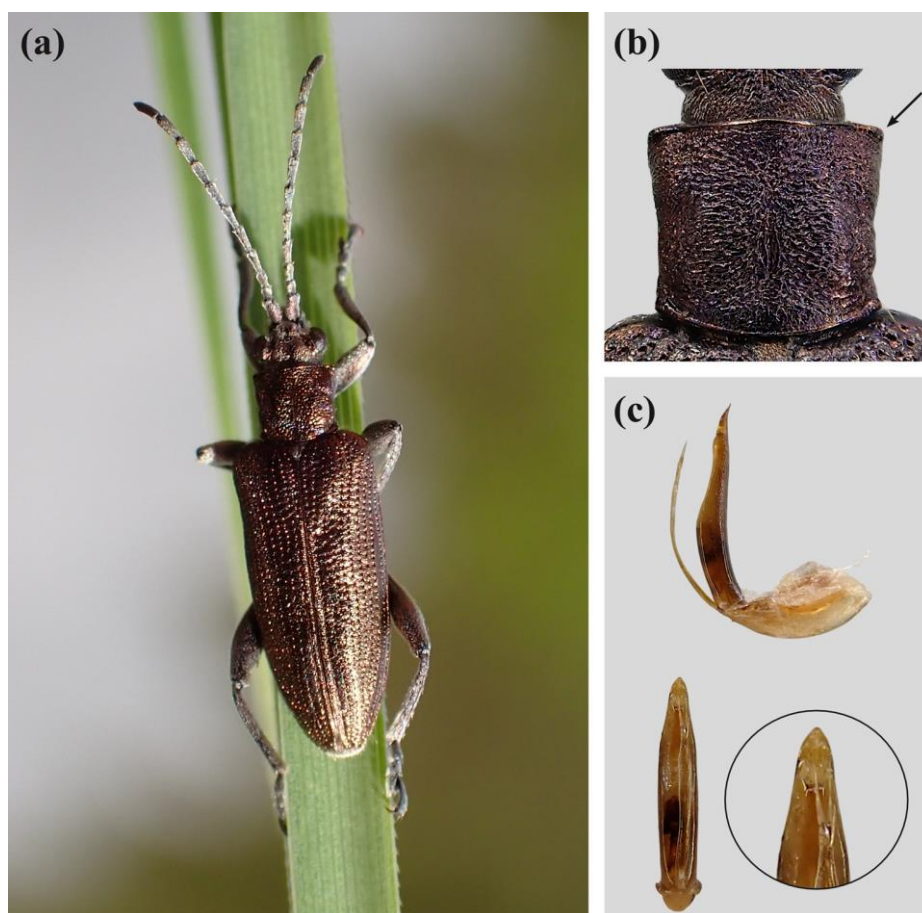


Figure 2. Specimen of *Donacia springeri* observed in 2025 in the commune of La Voivre (Haute-Saône): a) adult male in situ; b) close-up of the pronotum; c) lateral and frontal view of the aedeagus.

Figure 2. Individu de *Donacia springeri* observé en 2025 sur la commune de La Voivre (Haute-Saône) : a) mâle adulte in-natura ; b) zoom sur le pronotum ; c) édéage en vue latérale et frontale.

countries, adults are even visible from the beginning of April (Lombardy, Italy: RAVIZZA 1973; Upper Austria, Austria: GEISER & BROJER 2016). Finally, a few European captures were also made at the beginning of June (HEISS 1971, LJUNGBERG 2013) and even early July above 1 000 m (KIPPENBERG 1966).

4. Prospects

Currently, all contemporary French data are concentrated in a small area of around 40 square kilometers located in the natural region of the “Plateau des mille étangs” (north-east of Haute-Saône). This heavily wooded geographical area is particularly known for its numerous lakes and

peat bogs, which gave it its name. *D. springeri* seems to find habitats favourable to its development there, and targeted research in this area should undoubtedly lead to the discovery of new locations for this rare species. A specific program aimed at improving knowledge of Donaciinae is expected to be launched in Franche-Comté, freeing up time to carry out this research. Given the large number of potentially favourable environments, entomologists prospecting in this area are invited to participate by collecting specimens observed on the host plants mentioned above. In order to maximise the chances of finding it, prospecting should begin in April and continue until early June.

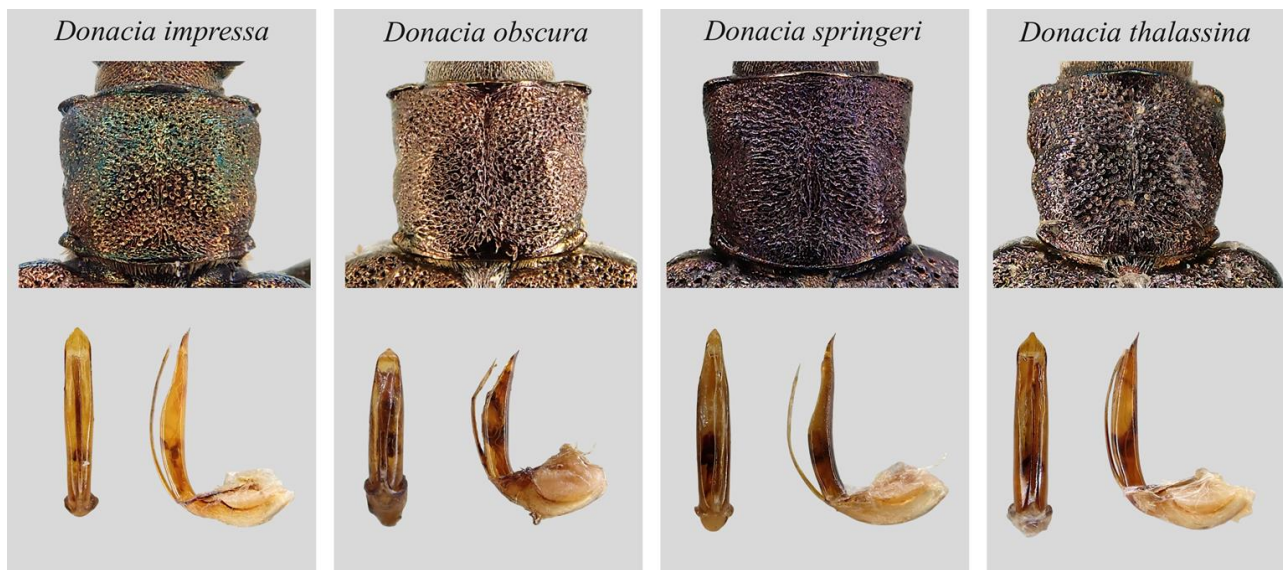


Figure 3. Comparison of the pronotums and aedeagus of species closely related to *Donacia springeri*.

Figure 3. Comparaison des pronotums et des édés des espèces proches de *Donacia springeri*.

In the Auvergne-Rhône-Alpes region, it would be interesting to launch a similar initiative, particularly near the two historic locations, to see whether the species is still present or whether it has definitively disappeared from this area. Following the same logic, surveys in the south of the Vosges department, in the continuation of the “Plateau des mille étangs”, could also prove relevant.

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