

NEWSLETTER OBSERVATORY OF HIGH-STAKE SPECIES FOR HUMAN HEALTH



OBSERVATOIRE DES ESPÈCES
À ENJEUX
POUR LA SANTÉ HUMAINE

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AFEDA, 40 YEARS OF HISTORY

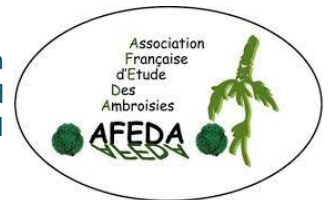
France

AFEDA is a French organization that has worked since the 80's on the study and monitoring of ragweed in France. It is the only European association specialized on the multidisciplinary international studies of *Ambrosia*. AFEDA is the pioneer of the 1st pollen air counting.

The general assembly of AFEDA took place on Saturday the 23rd of October 2021 in Lyon, France. This particular meeting marked the end of the presidency of Dr Chantal DÉCHAMP and the end of the AFEDA, which has been created in 1983.

Evaluate, understand and change the look of citizens and doctors on the pollinosis issue have been the motor of Dr DECHAMP 's career. Personally involved, she has been the **cause's voice in several international events**. She is the embodiment of Léonard Da Vinci 's vision by « having all obstacles reinforcing her determination ». She is a living example for all of us and her personality encourage us to give the best of ourselves for our common cause.

125 scientific publications, 39 years of data gathering and analysis from pollen captors, 85 ragweed reviews talking about multiple ragweed-linked subjects: those are just few numbers showing that the AFEDA have helped to increase the knowledge of ragweed and their pollens. Thank you.



THE GIANT RAGWEED AND THE CLIMATE CHANGE

France

Chinese scientists have evaluated the climate change's impact on the giant ragweed (*Ambrosia trifida*) allocation. According to their model, its distribution area could increase by 20% towards north¹.

Among all the environmental factors, rainfalls and temperature are the most impactful criteria in the species spreading, at respectively 40% and 56%. **Agricultural and construction fields have been identified as the most risky areas in matter of giant ragweed 's invasion.**

In France this plant is mostly present in the south, but if we apply the results of this study to the French case, we can easily think that the giant ragweed will soon or later colonize the entire country, a case scenario similar to the massive scattering of the common ragweed.

As a reminder, the **giant ragweed can reach 4 meters high and produce up to 200 seeds. Moreover, it is a pioneer invasive plant that grows on naked surfaces and is adapted to every type of soils.** That is why it can be present in numerous crops, especially spring crops. Furthermore, in its native area, a lot of giant ragweed 's populations are known to be herbicide resistant.

Every new detected spot has to be taken in charge quickly in order to avoid :

- **Management costs raising** up to thousands of euros (weeding, tillage...),
- **Spring crops yield reduction**, from 13% to 50% (even for a low ragweed density),
- **The loss of the entire yield** that can quickly be reached,
- **The crop downgrading** because of the presence of ragweed seeds.

In France, negotiations between agricultural actors and the Department of Agriculture and Food are in progress for the integration of the Giant ragweed into the crop protection regulations. This would reduce Giant ragweed agricultural impacts. **Are there ragweed control in your country regulations ?**

THE FOREST CATERPILLAR HUNTER, A HELP FOR PROCESSIONARY ISSUE ?

France

Oak and pine processionary caterpillars are known for their impacts on human and animals health, and for their forests damages. Those annoyances could become just a souvenir thanks to this colorful insect?

Measuring from 21 to 35 mm, the forest caterpillar hunter, *Calosoma sycophanta* can be recognized by its characteristic blue metal color. You can find this predator in oak and pine forests, in the herbaceous stratum or on the trunks.

Mostly known to predate the gypsy moth, *Lymantria dispar*, the forest caterpillar hunter has been introduced in Corsica (south of France) in the 20th century in order to fight it. According to the French National Inventory of Natural Heritage (INPN), in 2017, a stock of 141 forest caterpillar hunter presence data was taken. The majority of those data were in the south of France, near the Mediterranean sea. In 2019, new observations showed its presence in Île-de-France (north).

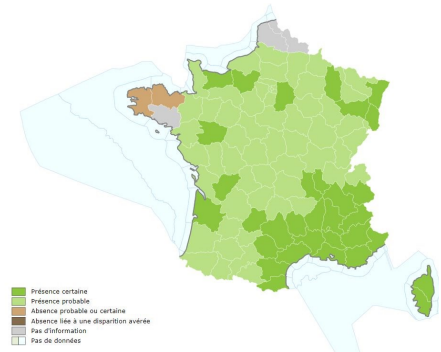
Except its preference for the gypsy moth, the forest caterpillar hunter is also a huge predator of the oak and pine processionary caterpillars.

Could this beetle become an auxiliary for the regulation of those and reducing their public health and silviculture issues?

Well, if the forest caterpillar hunter 's predation pressure on *L. dispar* is proved, its impact on processionary species populations is difficult to evaluate and is sparsely studied. Especially because it isn't the only factor of regulation of those species... A more systemic research and reporting should allow a better monitoring of the forest caterpillar hunter populations variations.



Forest caterpillar hunter,
Thomas Huntke.



Calosoma sycophanta repartition
in France, INPN, MNHN & OFB

POULTRY AND WILD BIRDS SEEDS : AN INTRODUCTION WAY FOR RAGWEED IN LOW-CONTAMINATED TERRITORIES?

Belgium

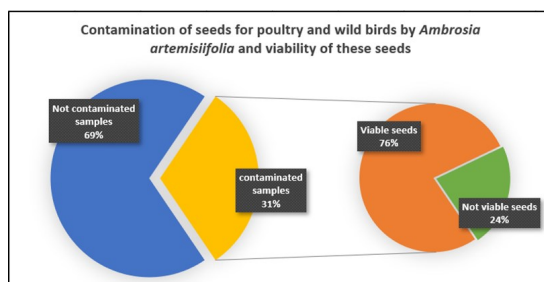
The Walloon Ragweed Observatory tries to provide answers.

Although ragweed is not yet widespread in the Walloon Region (Belgium), it is relevant to characterize the ways of introduction of the species in order to curb its progression³.

In areas where the species is still scarce, **contamination of seeds for poultry and wild birds is suspected to be one of the most important source of ragweed propagation.**

In order to better understand the importance of this introduction pathway, 42 samples of various seed mixtures for poultry and wild birds, from 11 different brands, were collected and analyzed. 2 kg of each mix were sorted, and the results are striking: **nearly one bag out of three (31%) was contaminated with seeds of *Ambrosia artemisiifolia*.** Although these contaminations remain within the **quotas of European regulations (<50mg / kg), the vast majority (over 75%) of the seeds harvested are viable.**

The presence of ragweed seeds in these widely distributed seed mixes thus represents **an entry point for the plant and can lead to new invasion spot.** It therefore seems necessary to increase **public awareness** and implement practices to curb the spread of ragweed via this type of vector.



SHORT NEWS

- **Ambrosia in Europe, EMAPI 2019** : go watch our last video interview of Johan Van Valkenburg (Netherlands), [on YouTube](#).
- **IRS CONFERENCE** will take place in Budapest on **September the 8th & 9th of 2022**. You can answer for the call of abstracts online : <http://internationalragweedsociety.org/irs2022budapest/>.



INFORMATION SOURCES

1. **Qian-qian MA & al.** [Répartition géographique potentielle d'*Ambrosia trifida* au Xinjiang sous le changement climatique \[J\]. Acta Prataculturae Sinica, 2020, 29\(12\) : 73-85.](#)
2. **Meriguet, Bruno & Lepri, Emma. (2018).** [Présence de *Calosoma sycophanta* \(L., 1758\) en Île-de-France \(Coleoptera Carabidae\). 74. 17-21.](#)
3. **A. Delforge ; Z. Etcheverria ; A. Monty.** Walloon Ragweed observatory.

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Find all the Observatory actions on social medias :



Former Ragweed Observatory letters can be [consulted here](#)