

# NEWSLETTER OBSERVATORY OF HIGH-STAKE SPECIES FOR HUMAN HEALTH



OBSERVATOIRE DES ESPECES  
A ENJEUX  
POUR LA SANTE HUMAINE

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## LET'S TALK ABOUT AMBROSIA !

News

The International Ragweed Society is pleased to announce the start of regular sessions "Let's talk about *Ambrosia*!".

"Let's talk about *Ambrosia*!" are **short online conferences** that aim to share between all persons interested in this plant knowledge about all aspects of vital ragweed functions, its impact and means of control.

The procedure is simple: a respectful speaker presents his/her project, work or research outcomes concerning *Ambrosia* during 15 min. Next 15 minutes the public can address questions to the speaker on his presentation.

Theme "Citizen science to tackle *Ambrosia artemisiifolia* populations and prevent future invasion ?" was presented by the 7th of September by Pr Arnaud Monty from the University of Liège, Belgium during the **first *Ambrosia* talk**.

Please come many! The first three *Ambrosia* talks will be open to everyone!



LET'S TALK  
ABOUT  
**Ambrosia !**

Short conferences online organised by the  
**International Ragweed Society**

[internationalragweedsociety.org](http://internationalragweedsociety.org)

The following will be reserved for IRS members. To become a member of IRS, please go to the link: <https://internationalragweedsociety.org/2023-2024-irs-membership/>

**You can be a speaker too!** If you would like to present your ragweed-related work or project to the community, please contact: [irs.ragweed@gmail.com](mailto:irs.ragweed@gmail.com) with a short summary of your presentation proposal.

## EU NORMS AND RULES FOR SEEDS MATERIAL

Europe

The seed production of agricultural plant species and seed lots in Europe is closely regulated by European regulation. It defines the quality standards that must be met in the field for the seed production. This regulation is currently reviewed and could be upgraded with new rules.

As you may remember in our [Observatory letter n°4 of november 2022](#), we invited you to add your name in the list of signatories on an open letter to European instance **asking for adapting the regulation relative to crop seeds in Europe with the addition of *Ambrosia* spp. in the list of prohibited species** (zero *Ambrosia* seed allowed in a sample of crop seed).

**The new proposal for Seed Marketing in the EU was presented by the Commission on July 5th '2023.** This document sets a broad framework and encompasses many aspects. The next step will be a period to react to the proposal. Then the EU Parliament and



Council will begin their own process of assessing and amending the text. Then many delegated and implementing acts will be adopted in a second time. Finally, this is in these acts that our demand could be introduced.

There is still a long way to go !

Meanwhile, **you can still sign the letter** and solicit your ministries and thus transmit this request by as many ways as possible.

## PROCESSING CONDITIONS WHICH MAKE THE AMBROSIA SEEDS NON-VIABLE

Which processing conditions makes *Ambrosia* seeds non-viable in feed materials and compound feed ?

This is the question from the European Commission that a scientific group formed by the European Food Safety Authority (EFSA) attempted to answer at<sup>1</sup>.

Ragweed seeds are known contaminants in feed materials and compound feed with maximum levels set in an European directive<sup>2</sup>. However, some feeds are more likely to contain viable seeds than others. Indeed, manufacturing processes and processing conditions applied to the feed may affect the viability of the *Ambrosia* seeds.

**The scientific group concluded that in poultry, pig, and possibly cattle feed, particle sizes are  $\geq 1$  mm could likely (66-90% certainty) survive the grinding process. Therefore, this process (e.g. hammer and roller mill) can pass viable ragweed seeds.**

This assessment also includes information on a reliable procedure to verify the non-viability of the seeds.

**The scientific group concluded by recommending to generate data on the presence of viable seeds of the genus *Ambrosia* before and after the different feed production processes.**

These other processing conditions studied seem to be very effective in eliminating viable ragweed seeds :

- Oilseed meals obtained during oil production (solvent extracted and oilseed meals toasted at temperatures of about 120°C with steam injection and for time of  $\geq 10$  min),
- Milling/grinding feed materials intended for piglets, aquatic species and non-food producing animals,
- Wet milling (starch and gluten either from corn or wheat wet milling),
- Ensiling fresh forages for more than 3 months.



### SOURCES

1. **Proposal for a regulation of the european parliament and of the council on the production and marketing of plant reproductive material in the Union** [https://food.ec.europa.eu/system/files/2023-07/prm\\_leg\\_future\\_reg\\_prm.pdf](https://food.ec.europa.eu/system/files/2023-07/prm_leg_future_reg_prm.pdf)
2. **EFSA CONTAM Panel, Scientific Opinion on the assessment of the processing conditions which make the *Ambrosia* seeds non-viable.** EFSA Journal 2023; 21( 7):8102, 27 pp. <https://doi.org/10.2903/j.efsa.2023.8102>
3. **Directive 2002/32/EC** of the European Parliament and of the Council of 7 May 2002 on undesirable substances in animal feed. <http://data.europa.eu/eli/dir/2002/32/2015-02-27>
4. **Xian et al, 2023 Climate change has increased the global threats posed by three ragweeds (*Ambrosia* L.) in the Anthropocene** Science of the Total Environment **859**, 160252

### Science

## ANOTHER STUDY CONFIRMS THE IMPACT OF CLIMATE CHANGE ON RAGWEED SPECIES DISTRIBUTION

Xian et al from the Chinese Academy of Agricultural Sciences in Beijing modelled the potential geographic distributions of the three ragweed species : *Ambrosia artemisiifolia*, *A. psilostachya* and *A. trifida* under the current climate and future climate change<sup>4</sup>.

They used model under four representative concentration pathways (RCP2.6, RCP4.5, RCP6.0, and RCP8.5) in 2050 to predict the potential geographical distribution, overlapping geographical distribution areas, and the ecological niche dynamics of these three ragweeds.

Corroborating other previous studies, the model indicates that, for the three species of *Ambrosia*, the potential geographical distribution will extend and continue to spread northward in the four scenarii

compared to the potential habitat with the current climate.

The increased overlapping geographical distribution areas of the three ragweeds would be mainly distributed in Asia (Kazakhstan and China), Europe (western Russia), and North America (Canada) in the 2050s.

To our knowledge, this study is the first to determine the **global invasion trends** of three *Ambrosia* species under climate change scenarii.

### SHORT NOTICE

- **15th of September 2023 - Kick-off Meeting of the EWRS Working Group on Biological Control, Aveiro (Portugal):** In order to pursue the re-establishment of the biological control working group, **a one day kick-off meeting** is planned in Aveiro (Portugal) on the 15 September 2023. Although independent the kick-off meeting will take advantage of the preceding **IOBC meeting “Benefits and Risks of Exotic Biological control agents”** held at the same location from 11-14 September in order to facilitate synergies between the two events, i.e. allowing participants to attend both meetings.

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