

Outlook

Uwe Starfinger¹, Ulrike Sölter², Arnd Verschwele²

¹Julius Kühn-Institut, Federal Research Centre for Cultivated Plants, Institute for National and International Plant Health, Messeweg 11/12, 38104 Braunschweig, Germany; e-mail: uwe.starfinger@julius-kuehn.de

²Julius Kühn-Institut, Federal Research Centre for Cultivated Plants, Institute for Plant Protection in Field Crops and Grassland, Messeweg 11/12, 38104 Braunschweig, Germany

DOI 10.5073/jka.2016.455.46



Common ragweed is a very prominent alien species in Europe and in other invaded ranges, mostly because of its impact on human health, but also because of the damage it causes in agriculture. Because of this, even before our project, there was plenty of information available on all aspects of the species including its biology and ecology, impacts, and control options.

As this volume shows, the project HALT Ambrosia has addressed some gaps in this knowledge base and has systemically conducted series of experiments mainly on some aspects of germination biology and on control options. In addition, some review-type chapters have comprehensively collected and discussed already existing information. The results of the project have been presented in numerous forms, as in publications and conference papers. They were specifically discussed in national conferences; proceedings of the German and Austrian conferences have been published (Karrer 2011, Starfinger *et al.* 2014).

The interest in the species is ongoing and the amount of knowledge on it is growing continuously, comprehensive overviews were recently published, e.g., Essl *et al.* 2015, Buters *et al.* 2015.

The overall conclusion from our and from other published research is that common ragweed can be successfully controlled when management measures suitable for the specific situation are chosen. If management is performed it is more a question of political will, legislative circumstances, and available resources than of applicable management measures.

Activities trying to enhance ragweed control in Europe are also ongoing. The COST action SMARTER (Sustainable management of *Ambrosia artemisiifolia* in Europe) provides a forum for discussing long-term management and monitoring options (ragweed.eu). The International Ragweed Society (<http://internationalragweedsociety.org>) aims at promoting the knowledge about ragweed and at facilitating collaboration, research, etc. in order to enhance the fight against the plant.

The team of the HALT Ambrosia project (07.0322/2010/58340/SUB/B2) wish to express its thanks to the European Commission, DG Environment for financial support.

References

- Buters J.T.M., Alberternst B., Nawrath S., Wimmer M., Traidl-Hoffmann C., Starfinger U., Behrendt H., Schmidt-Weber C., Bergmann K.C. (2015): *Ambrosia artemisiifolia* (ragweed) in Germany. Current presence, allergologic relevance and containment procedure. *Allergo J Int* 2015; 24:108–20
- Essl, F., Biró, K., Brandes, D., Broennimann, O., Bullock, J. M., Chapman, D. S., Chauvel, B., Dullinger, S., Fumanal, B., Guisan, A., Karrer, G., Kazinczi, G., Kueffer, C., Laitung, B., Lavoie, C., Leitner, M., Mang, T., Moser, D., Müller-Schärer, H., Petitpierre, B., Richter, R., Schaffner, U., Smith, M., Starfinger, U., Vautard, R., Vogl, G., von der Lippe, M. and Follak, S. (2015): Biological Flora of the British Isles: *Ambrosia artemisiifolia*. *Journal of Ecology*, 103: 1069–1098. doi: 10.1111/1365-2745.12424
- Karrer, G. (2011): Ausgangssituation und Projektstruktur: Ragweed - Ausbreitungsbiologie und Management einer extrem allergenen, eingeschleppten Pflanze – Wege und Ursachen der Ausbreitung von Ragweed (*Ambrosia artemisiifolia*) sowie Möglichkeiten seiner Bekämpfung. Ragweed - eine invasive Pflanze mit allergenem Potential: Wege und Ursachen der Ausbreitung von Ragweed sowie Möglichkeiten der Bekämpfung , 25. 11. 2011, AGES, Wien
- Starfinger, U., Sölter, U., Verschwele, A. (Hrsg.) (2014): *Ambrosia in Deutschland - lässt sich die Invasion aufhalten?* Julius-Kühn-Archiv 445, 165 pp.