

BSBI Science

Volunteers make an enormous contribution to our knowledge of the natural environment and it is through the BSBI that the biggest contribution is made to our understanding of British and Irish flora. BSBI volunteers make over a million observations each year and these provide the long term knowledge needed to map, track and understand change in plant populations. Our core scientific aim is to enable and deliver high-quality and relevant science that use these data to assess the state of our natural world, how it is changing and why. To achieve this BSBI scientists work collaboratively with other NGOs, universities and research institutes on a wide range of research projects. We also deliver the practical, science-based information needed by conservationists and other land managers to help plan, prioritise and report on strategic environmental objectives.

Our most significant outputs include:

- High quality, long term datasets, verified by experts and continually updated
- National distribution atlases
- Scientific papers and reports
- National and country Red Lists
- Taxonomic handbooks covering difficult genera
- Authoritative species accounts
- Information on non-native plants
- Expert botanical advice including online resources

Scientific priorities

Our core aim is to deliver high quality and relevant science that allows us to:

- Monitor the distribution and status of both native and non-native plant populations
- Develop robust monitoring and surveillance schemes that are attractive to volunteers
- Identify the causes of change including land management, pollution, invasive species, pest and pathogens and climate change
- Improve understanding of species ecology, evolution and taxonomy as well as interactions with other wildlife groups
- Provide practical, science-based information for more effective conservation and management of species and habitats, including the development of conservation priorities and implementation of both national and international environmental policies

Relevance

BSBI data and science contributes to a number of key environmental policy areas:

- National and international priority-setting for species conservation (e.g. country Red Lists, statutory mechanisms, etc.)
- Targeting of protected areas (PA) and land management (LM) schemes
- Reporting against national and international obligations for species and habitat conservation
- Reporting on the effectiveness of environmental interventions such as agri-environment schemes
- Monitoring and reporting on the impacts of non-native invasive species, including early warning of future arrivals and the impacts of novel pests and pathogens (e.g. Phytophthora, Chalara)