Botanist

Botanists, or Plant Biologists, study all forms of plant life, including fungi and algae, in the laboratory or in their natural environment. They work for a wide range of industries including agriculture, environmental conservation, forestry, pharmaceuticals and food science.

The Work

You could work in one of a number of specialist areas including:

- **plant ecology** – how plants interact with each other in their environment
- **plant physiology** – the structure of plants
- **plant taxonomy** – identifying and classifying plants.

You could be:

- identifying, recording, monitoring or breeding a plant species or searching for a new species
- carrying out surveys of a certain species in a particular habitat, such as meadows, woodlands or moorland
- studying plant populations at a number of sites across different locations, to investigate the effects of pollution, drought or agricultural pests
- studying plant cells, structure and function, extracting any useful chemicals
- working in conservation, protecting plant life in a local area, promoting public awareness through activities or managing plant collections at a botanic garden
- using specialist laboratory equipment and techniques, such as electron microscopes, digital imaging analysis and satellite imaging
- exploring the use of plants in medicine, for example finding out if a plant has anti-bacterial or anti-oxidant properties
- studying plant evolution or genetics
- collecting and analysing data, writing reports and making recommendations based on the results of experiments or observations.

Pay

The figures below are only a guide. Actual pay rates may vary depending on:

- where you work and your experience
- the size of the company or organisation you work for
- the demand for the job.

Salaries for Botanists vary depending on the type of work they do. Starting salaries for graduates tend to be around £24,000 a year. For research posts, pay can be up to around £30,000 a year while a senior research post can be between £35,000 and £45,000 a year.

There are opportunities in both the public and private sectors and pay rates will vary.

Conditions

- If you work as a research botanist you would spend most of your day in a laboratory.
- If you work in a college or university you would spend time in offices, classrooms and laboratories.
- You would work around 37 hours a week, but may have to work overtime to meet deadlines.
- In conservation or fieldwork, you would have to work evenings and weekends and sometimes stay nights away from home.
- In fieldwork you would have to work in all kinds of weather, and sometimes at hazardous sites, such as marshes, peatbogs or on hillsides.
- Carrying out fieldwork surveys involves being on your feet for most of the day.

Getting In

- Entry is competitive, especially in fieldwork and conservation work.
- You need a degree (SCQF Levels 9-11) in plant science or a biology related subject. Relevant subjects include botany, plant biology, plant science, environmental science and ecology.
- There is a wide range of plant science degree courses. It is important to check the course content to make sure the one you choose is suitable for the work you want to do.
- For entry to a degree, you usually need 4-5 Highers, normally including at least 2 from Maths, Biology, Chemistry and Physics. Biology and Chemistry are often preferred.
- Joining a local interest group and gaining fieldwork skills in identifying plants and carrying out surveys is useful and sometimes essential.
- Many entrants have a postgraduate qualification (SCQF Level 11) in a specialist plant biology subject. This is usually essential for research posts.
- Getting relevant work experience as part of your course or through an internship or work placement will increase your chances of getting your first job.
- You usually need a driving licence.

Botanists work for a variety of organisations including government research institutes, universities, environmental consultancies, conservation organisations, botanical gardens and collections and the food industry. Look for jobs in journals such as New Scientist, Nature or Horticulture Week.

What Does It Take

You need to be:

- able to analyse and interpret data
- practical
- logical and methodical
- good with numbers
- flexible and adaptable
- accurate and careful in recording results in the laboratory or in the field.

You should have:

- a strong interest in plants and science

- excellent analytical skills
- good problem solving skills
- an enquiring mind
- excellent attention to detail
- good communication and team working skills
- initiative to develop new ideas and solve problems.

Training

- Training is on the job as you must keep up to date in your specialist area.
- The Royal Society of Biology offers a continuing professional development (CPD) scheme. This can lead to the chartered status of membership.

Getting On

- You may have to take a postgraduate qualification (MSc) or Doctorate (PhD) (SCQF Level 12) in a specialist subject and gain professional qualifications to progress in your career.
- You could become self-employed or freelance and work as a consultant.
- If you work in fieldwork, conservation or for a global organisation, you might work overseas.
- You may move into education to become a lecturer or researcher.

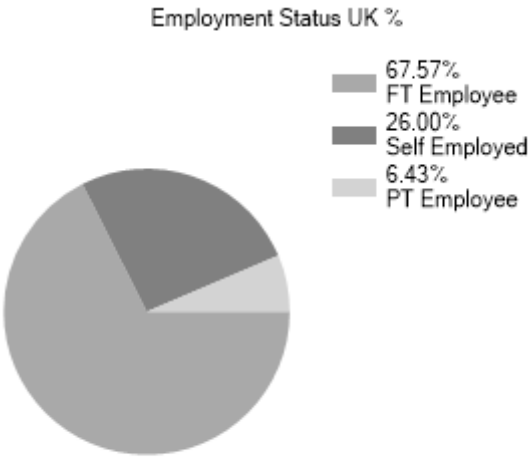
Contacts

Botanical Society of Britain and Ireland
Tel: 07725 862957
Email: enquiries@bsbi.org
Website: www.bsbi.org
X: @BSBIbotany
Facebook: www.facebook.com/BSBI2011

Lantra Scotland
Tel: 024 7669 6996
Email: scotland@lantra.co.uk
Website: www.scotland.lantra.co.uk
Facebook: www.facebook.com/lantrascotland

Royal Botanic Garden Edinburgh (RBGE)
Tel: 0131 248 2909
Website: www.rbge.org.uk
X: @TheBotanics
Facebook: www.facebook.com/thebotanics/?ref=ts

Statistics



LMI data powered by LMI for All

Past Unemployment - Scotland

No Claimant statistics available for Scotland.

Predicted Employment Statistics : Not available this career.