

Some useful websites and apps for plant identification

Free automatic image recognition apps for plant id:

PlantNet (<https://identify.plantnet.org/>)
Seek (by iNaturalist) (https://www.inaturalist.org/pages/seek_app)
ObsIdentify (<https://waarneming.nl/apps/>)
iNaturalist (App only -<https://www.inaturalist.org/>)
Google Lens (<https://lens.google.com>)
Flora Incognita (<https://floraincognita.com/>)
Candide (<https://candidegardening.com/>)
[Plant.id (<https://plant.id/>) - only 5 analyses/week]

N.B. Seek is the only one that works off-line, and is good at avoiding incorrect IDs. PlantNet and Flora Incognita both allow one to submit several images (leaf, flower, etc.) which can improve performance.

Other automatic apps (but not recommended!):

PlantSnap (<https://www.plantsnap.com/>) - only 10/day without Premium
Bing (<https://www.bing.com/>)
iPlant Plant identifier (iOS only) (<https://apps.apple.com/gb/app/iplant-plant-identifier/id1372113110>)
Plant identifier by Rakata Tech
(https://play.google.com/store/apps/details?id=rakta.plant.identification&hl=en_GB)

Identification by experts or community feedback:

The following all allow users to post images for identification by experts or other botanists: "iSpot" (www.ispotnature.org); "Flowerchecker" (<https://flowerchecker.com>); "SmartPlant" (<https://smartplantapp.com>); "iNaturalist"; or it is possible to use Twitter (#PlantID, #wildflowerid, @BSBIbotany) or other social media. There is also scope to seek expert or community suggestions from "Flora Incognita" and "Candide" (see above)

Other websites and apps for Botanical identification requiring user input:

Visual-flora (visual-flora.org.uk) - a key for plant identification using floral or vegetative characters.

The Botanical Society of Britain and Ireland website (<https://bsbi.org/identification>) has links to many keys including the useful "BotanicalKeys" site (<http://www.botanicalkeys.co.uk/flora/>) and the Makaques app (paid) (<http://www.makaques.com>) which are useful multi-access keys, and links to several websites with good pictures of the British flora (e.g. "Pictorial guide to the flora of the British Isles" (<http://www.makaques.com/pictorial.htm>), "Wildflowerfinder" (<https://wildflowerfinder.org.uk>) and the "Floral Images" website (<http://www.floralimages.co.uk/>). N.B. PlantNet also has a large database of images visible after clicking on an identified species.

There are many other keys available as apps, but large numbers of these are primarily targeted at other regions of the world (especially the USA). However, the following are useful for the UK: "iPflanzen" (iOS - 1500 spp. - <https://apps.apple.com/gb/app/ipflanzen/id416983587>), "Naturegate" (iOS - 700 spp. - <http://kukkakasvit.luontoportti.fi>) and many specialist ones for specific plant groups.

Reviews of Automatic Plant ID apps:

Hamlyn Jones (2020) "*Artificial Intelligence for plant identification on smartphones and tablets*" BSBI News (<https://bsbi.org/download/20398/>)

and

Hamlyn Jones (2020) "*What plant is that? Tests of automated image recognition apps for plant identification on plants from the British flora*" AOBPlants, Vol 12, Dec 2020

(<https://doi.org/10.1093/aobpla/plaa052>)

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