

Himalayan Balsam, *Impatiens glandulifera*



Overview

Short description of *Impatiens glandulifera*, Himalayan Balsam

Glabrous annual herb with stout succulent, reddish-translucent hollow stems to 2.5 m; leaves opposite or in whorls of 3, 5-18 cm long and 3-7 cm wide; flowers with short spur, helmeted upper petal, deep purplish-pink to white, strong balsam smell.

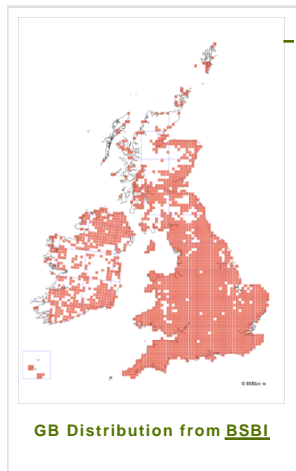
Description of *Impatiens glandulifera*, Himalayan Balsam status in GB

Well established and extremely invasive throughout most of lowland Great Britain.

Habitat summary: *Impatiens glandulifera*, Himalayan Balsam

Moist and semi-shaded damp places, predominant on banksides by slow-moving watercourses.

Distribution map



Author's name:

Peter Day

Last updated:

November 27th 2015

We try to keep these factsheets up to date, however if you notice any issues please contact us

Overview table

Environment:	Terrestrial
Species status:	Non-Native
Native range:	Himalayas
Functional type:	Land plant
Status in England:	Non-Native
Status in Scotland:	Non-Native
Status in Wales:	Non-Native
Location of first record:	v.c.21
Date of first record:	1855

Invasion history: *Impatiens glandulifera*, Himalayan Balsam

Origin

Native to the western and central Himalaya.

First Record

First introduced in 1839. First records of naturalisation were Hertfordshire and Middlesex in 1855.

Pathway and Method

Introduced to Kew Gardens by Dr Royle from Kashmir. Floating seeds can travel long distances before becoming lodged and germinating in a soft muddy bankside. However, the most widespread distribution has been by human means where individuals pass on seed to others.

Species Status

It is a major weed problem, especially on riverbanks and waste land, but can also invade gardens. It grows rapidly and spreads quickly. The plant is widespread throughout northern and eastern Europe and central Scandinavia, where it has reached pest status in many countries. It is also classified as a noxious weed in 3 US States. It is listed on Schedule 9 of the Wildlife and Countryside Act 1981 with respect to

England and Wales, which makes it an offence to plant it or introduce it to the wild.

Ecology & Habitat: *Impatiens glandulifera*, Himalayan Balsam

Dispersal Mechanisms

At ripening, explosive dehiscence of the fruit capsule; each plant ejecting as many as 800 seeds for a distance of up to 7 m.

Reproduction

Germination occurs in February-March, followed by rapid shoot extension and leaf expansion from April. Plants flower from July to October, setting seed from mid-July onwards. Onset of flowering can be delayed by 2-3 weeks in shaded sites.

Known Predators/Herbivores

In GB, sheep and cattle are known to graze the leaves, stems and flowers indiscriminately. Two species of aphid are known to feed on the plant. It is also a recognised food plant of the Elephant Hawk-moth.

Resistant Stages

Most seeds overwinter for one season before germinating the following spring; however, there is some evidence of a persistent seedbank lasting for at least 2 years.

Habitat Occupied in GB

Moist and semi-shaded places, waste ground, thin woodlands; but particularly on soft banks by slow-moving water along canalsides, streams and rivers.

Distribution: *Impatiens glandulifera*, Himalayan Balsam

Widespread distribution across most of lowland England and Wales and many parts of Scotland and Ireland. It now occurs in the Channel Islands and at least 108 of the 112 vice-counties in over 2000 10 km (hectad) squares.

Impacts: *Impatiens glandulifera*, Himalayan Balsam

Environmental Impact

Shades out and crowds out many native species, and produces much nectar and therefore attractive to pollinating insects, possibly to the detriment of native flowering plants.

Health and Social Impact

Has the ability to completely change the appearance of riverbanks with its large showy, highly attractive and pungent flowers. Not known to be poisonous, but has a bitter taste if ingested.

Economic Impact

Having become dominant in its invaded habitat, the shallow root system can promote erosion during the annual cycle through dieback and subsequent destruction of bankside structure. Dense stands can impede water flow at times of high rainfall, thereby increasing the likelihood of flooding.

References & Links: *Impatiens glandulifera*, Himalayan Balsam

Identification

Garrard, I. & Streeter, D. (1998) *The wild flowers of the British Isles*. Midsummer Books Ltd., London.

Stace, C.A. (2010) *New flora of the British Isles, Third Edition*, Cambridge University Press, Cambridge.

Biology, ecology, spread, vectors

Beerling, D. J. & Perrins, J. M. (1993) Biological Flora of the British Isles: *Impatiens glandulifera* Royle (*Impatiens roylei* Walp.), *Journal of Ecology*, **81**, 367-382.

Perrins, J., Fitter, A. & Williamson, M. (1993) Population biology and rates of invasion of three introduced *Impatiens* species in the British Isles, *Journal of Biogeography*, **20**, 33-44.

Pyšek, P. (1995) Invasion dynamics of *Impatiens glandulifera* - a century of spreading reconstructed, *Biological Conservation*, **74**, 41-48.

Management and impact

Perrins, J., Fitter, A. & Williamson, M. (1990) What makes *Impatiens glandulifera* invasive? In: Palmer, J. (ed.) *The biology and control of invasive plants*. British Ecological Society Symposium, University of Wales. September 20-21 1990, pp. 8-33.

General

Preston, C.D., Pearman, D.A. & Dines, T.D. (2002) *New Atlas of the British and Irish Flora*, Oxford University Press, Oxford.