

**Supplementary file 2, additional information:
Maximum vegetation height in summer and spring**

Data collection

Maximum height of the resident vegetation and of *I. glandulifera* was recorded per plot within the vegetation surveys (2016-07-12/08-17 in summer, 2017-04-20/05-04 in spring, see Materials and Methods section of the manuscript). The five tallest plant individuals per plot were chosen regardless of the plant species, their height was measured with a folding ruler to the next cm and the mean was calculated. Because in seven plots the plants were pressed to the ground due to rainfall or wind we could not measure vegetation height in these plots and number of replicates decreased to 107 for vegetation height in summer.

Results

In summer *I. glandulifera* plants had a maximum height of 33 - 295 cm, significantly increasing with its own cover. From a cover larger than 20 % *I. glandulifera* plants were higher than the resident vegetation and this difference increased with increasing cover of *I. glandulifera* because the height of resident vegetation was quite constant and independent of *I. glandulifera* cover. In spring maximum height of *I. glandulifera* was 2-16 cm, which was, with one exception, always lower than the resident vegetation. Neither height of *I. glandulifera* nor height of the resident vegetation depended on the cover of *I. glandulifera*.

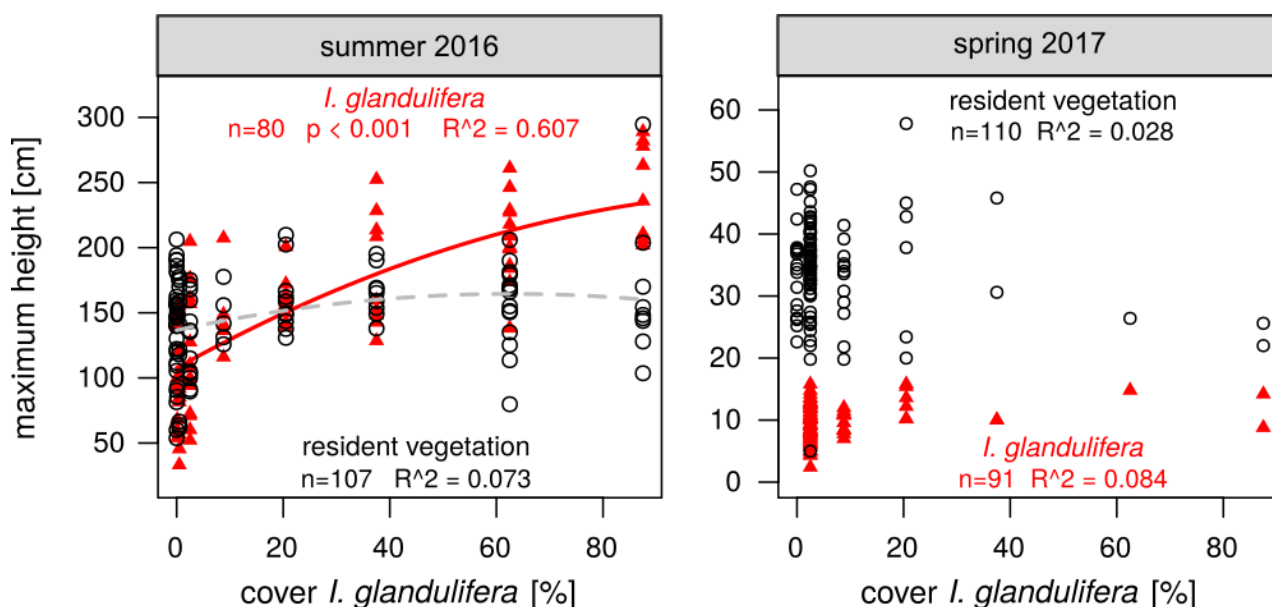


Figure legend. Maximum height of resident vegetation and of *Impatiens glandulifera* in summer 2016 and spring 2017. Dependence of the maximum plant height on cover of *I. glandulifera* was tested with a linear model according the formula $f(x) = ax^2+bx+c$. Number of samples, R^2 -values and if $R^2 > 0.1$ p -values are also reported. F -statistic *I. glandulifera* in summer: $F_{2,77} = 61.88$.