**Lindernia dubia** in the Czech Republic – distribution and ecology

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**DISTRIBUTION**

*Lindernia dubia* alien

firstly found in the Czech Republic in 1989

imported probably by men and waterfowl

*Lindernia procumbens* native

**Can alien species** *Lindernia dubia* affect endangered native species *Lindernia procumbens*?

**Conclusions**

- light is the most important factor which determines ecological differences between both *Lindernia* species
- most of ecological demands of both *Lindernia* species are overlapped
- *Lindernia dubia* in contrast to *L. procumbens* is taller, probably produce more seeds and it can exist in more types of plant communities

**ECOLOGY**

System of storage ponds - small ponds for storage of marketable fish. There were established permanent plots.

**ALLOMETRY**

Differences in allometry between *Lindernia dubia* and *L. procumbens* on different substrate (mud x sand).

**Detrended correspondence analysis (DCA) diagram of species with passively projected explanatory variables for vegetation on exposed bottoms of fishponds and storage ponds.**

**Box-and-whisker plots show significantly different affinities of both *Lindernia* species to light and temperature conditions.**

**Distribution of *Lindernia* in the Czech Republic**

Following growth parameters connected with seed production were measured: stem height (mm), number of flower branches, number of flowers/truits.

We randomly collected 20 individuals per species growing on different substrates - moist sand and mud.

Pearson correlation coefficient and one-way ANOVA analysis for describing differences between both species were used.

*In *Lindernia dubia*, strong correlation was found btw. number of flowers/truits and plant height.*

*On the contrary, the same features have no significance in *Lindernia procumbens.*

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