

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

0.1 Member State	HU
0.2.1 Species code	4068
0.2.2 Species name	<b>Adenophora lilifolia</b>
0.2.3 Alternative species scientific name	N/A
0.2.4 Common name	illatos csengettyűvirág

## 1. National Level

### 1.1 Maps

1.1.1 Distribution Map	Yes
1.1.1a Sensitive species	No
1.1.2 Method used - map	Complete survey/Complete survey or a statistically robust estimate (3)
1.1.3 Year or period	2007-2011
1.1.4 Additional map	No
1.1.5 Range map	Yes

## 2. Biogeographical Or Marine Level

### 2.1 Biogeographical Region

#### Pannonian (PAN)

### 2.2 Published sources

VOJTKÓ, A. 2007: Milic-csoport: Lászlótanya környéke In: Baráz, Cs. and G. Kiss. (eds.). A Zempléni Tájvédelmi Körzet. Bükki Nemzeti Park Igazgatóság, Eger pp. 125-126.

BORINNIKOVA, S. V. (2008): Genetic Variation in Ural Populations of the Rare Plant Species *Adenophora lilifolia* (L.) DC. on the Basis Analysis of Polymorphism of ISSR Markers. Russian Journal of Genetics 45(5):571-574.

MÁTHÉ, A. 2010: Csengettyűvirág. <http://knp.nemzetipar.gov.hu>

MATUS, G.; TAKÁCS, A. 2010: A Drahos, a Hemzső és a Gyertyán-kúti-rétek védett növényfajainak aktuális elterjedési és állományadatai. Kutatási jelentés ANPI, Jósvafő.

FARKAS, T.; VOJTKÓ, A. (2011): Az *Adenophora liliifolia* (L.) Bess aktuális helyzete Magyarországon. 1446. Botanikai Szakosztályülés 2011. november 14. megjelenés alatt a Botanikai Közleményekben várható

TAKÁCS, A.; MATUS, G. (2011): A zempléni Gyertyán-kúti-rétek csengettyűvirág állományának elterjedése, demográfiai és vitalitási alapfelmérése 1446. Botanikai Szakosztályülés 2011. november 14., Botanikai Közlemények (in press)

FARKAS, T.; VOJTKÓ, A.: Az *Adenophora liliifolia* (L.) Besser morfológiai változatossága és cönológiai viszonyai hazánkban [Phytosociological and morphological characteristics of the ladybells *Adenophora liliifolia* (L.) Besser in Hungary]. WEB: [http://florakonferencia2012.szie.hu/sites/default/files/Flora\\_Programfuzet\\_Vegetes.pdf](http://florakonferencia2012.szie.hu/sites/default/files/Flora_Programfuzet_Vegetes.pdf)

FARKAS, T.; VOJTKÓ, A. (2012): Az *Adenophora liliifolia* (L.) Besser morfológiai változatossága és cönológiai viszonyai hazánkban. *Kitaibelia* 17(1): 94.

TAKÁCS, A.; FARKAS, T.; MATUS, G. (2012): Demográfiai és vitalitási alapfelmérés az *Adenophora liliifolia* (L.) A. DC. állományában a regéci Gyertyán-kúti-réteken. *Kitaibelia* 17(1): 147.

A Nemzeti Biodiverzitás-monitorozó Rendszer keretében 2007-2012 között végzett felmérések kutatási jelentései

### 2.3 Range

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

2.3.1 Surface area - Range (km <sup>2</sup> )	491
2.3.2 Method - Range surface area	Complete survey/Complete survey or a statistically robust estimate (3)
2.3.3 Short-term trend period	2001-2012
2.3.4 Short-term trend direction	increase (+)
2.3.5 Short-term trend magnitude	min max
2.3.6 Long-term trend period	
2.3.7 Long-term trend direction	N/A
2.3.8 Long-term trend magnitude	min max
2.3.9 Favourable reference range	area (km <sup>2</sup> ) operator approximately equal to (≈) unknown No method
2.3.10 Reason for change	Improved knowledge/more accurate data Use of different method

## 2.4 Population

2.4.1 Population size (individuals or agreed exception)	Unit number of individuals (i) min 1 max 210
2.4.2 Population size (other than individuals)	Unit N/A min max
2.4.3 Additional information	Definition of locality Conversion method Problems A faj egyedszáma erősen fluktuál a külső környezeti változók, leginkább a csapadékmennyiség függvényében.
2.4.4 Year or period	2007-2011
2.4.5 Method – population size	Complete survey/Complete survey or a statistically robust estimate (3)
2.4.6 Short-term trend period	2001-2012
2.4.7 Short term trend direction	stable (0)
2.4.8 Short-term trend magnitude	min max confidence interval
2.4.9 Short-term trend method	Complete survey/Complete survey or a statistically robust estimate (3)
2.4.10 Long-term trend period	
2.4.11 Long term trend direction	N/A
2.4.12 Long-term trend magnitude	min max confidence interval
2.4.13 Long-term trend method	N/A
2.4.14 Favourable reference population	number operator much more than (>>) unknown No method
2.4.15 Reason for change	Genuine Improved knowledge/more accurate data

## 2.5 Habitat for the Species

2.5.1 Surface area - Habitat (km <sup>2</sup> )	0,017
2.5.2 Year or period	2007-2011
2.5.3 Method used - habitat	Complete survey/Complete survey or a statistically robust estimate (3)
2.5.4 a) Quality of habitat	Good
2.5.4 b) Quality of habitat - method	figyelembe vett körülmények: inváziós fertőzöttség, védettség, területhasználat, vízellátottság, szukcessziós viszonyok

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

2.5.5 Short term trend period	2001-2012
2.5.6 Short term trend direction	decrease (-)
2.5.7 Long-term trend period	
2.5.8 Long term trend direction	N/A
2.5.9 Area of suitable habitat (km <sup>2</sup> )	0,3
2.5.10 Reason for change	Genuine Improved knowledge/more accurate data Use of different method

## 2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
species composition change (succession) (K02.01)	high importance (H)	N/A
reduced fecundity/ genetic depression in plants (incl. endogamy) (K05.02)	high importance (H)	N/A
damage by herbivores (including game species) (K04.05)	medium importance (M)	N/A
Drying out (K01.03)	low importance (L)	N/A
mowing / cutting of grassland (A03)	low importance (L)	N/A

2.6.1 Method used – pressures based exclusively or to a larger extent on real data from sites/occurrences or other

## 2.7 Main Threats

Threat	ranking	pollution qualifier(s)
species composition change (succession) (K02.01)	high importance (H)	N/A
reduced fecundity/ genetic depression in plants (incl. endogamy) (K05.02)	high importance (H)	N/A
damage by herbivores (including game species) (K04.05)	medium importance (M)	N/A
droughts and less precipitations (M01.02)	medium importance (M)	N/A
intensive mowing or intensification (A03.01)	low importance (L)	N/A
invasive non-native species (I01)	low importance (L)	N/A

2.7.1 Method used – threats expert opinion (1)

## 2.8 Complementary Information

2.8.1 Justification of % thresholds for trends

2.8.2 Other relevant Information

2.8.3 Trans-boundary assessment

## 2.9 Conclusions (assessment of conservation status at end of reporting period)

2.9.1 Range	assessment Favourable (FV) qualifiers N/A
2.9.2. Population	assessment Bad (U2) qualifiers stable (=)
2.9.3. Habitat	assessment Inadequate (U1) qualifiers stable (=)
2.9.4. Future prospects	assessment Inadequate (U1) qualifiers stable (=)
2.9.5 Overall assessment of Conservation Status	Bad (U2)
2.9.5 Overall trend in Conservation Status	stable (=)

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## 3. Natura 2000 coverage and conservation measures - Annex II species

### 3.1 Population

3.1.1 Population Size	Unit	number of individuals (i)		
	min	1	max	210
3.1.2 Method used	Complete survey/Complete survey or a statistically robust estimate (3)			
3.1.3 Trend of population size within	N/A			

### 3.2 Conversation Measures

3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad Evaluation
Other species management measures (7.0)	Recurrent	high importance (H)	Inside	Long term
Maintaining grasslands and other open habitats (2.1)	Recurrent	high importance (H)	Inside	Maintain Enhance

