

REPORT ON THE STATUS OF THE RHODOPEAN LILY
(*Lilium rhodopaeum*) in the locality near village of Stoykite,
Smolyan district, Bulgaria – 2022

The locality of the Rhodopean lily was visited twice this year (26.06.22 and 13.08.22).

Total number of the population is 613 individuals, 356 of them flowering and 257 vegetative. This is the highest number of the individuals in the population since counts began!

Of the flowering individuals, there were 255 with a single bloom, 76 with 2 blooms, and 25 with 3 blooms in their inflorescence.



Two blooms on this Rhodope lily; general view over the site, with lilies and a false helleborine in the foreground (both 26 June 2022).

Ratio of the flowering/vegetative individuals is 1,39 (356F/257V) in favour of flowering ones.

The trend of increasing of the total population number continues this year too – up about 72%, compared with 2021.

Insects have damaged five of all individuals.

Among 2022, there were no impact of grazing in the population of the Rhodopean lily until the end of flowering season.

Due to the lack of grazing, we found an increase of bracken - *Pteridium aquilinum* and false helleborine - *Veratrum album*.

In several places in the locality, areas excavated by wild boars were observed.

This year Rhodope lilies failed to form fruit capsules.



Rhodope lily surrounded by bracken and wild boar rootings (26 June); lack of fruit capsules (13 August).

Table 1. Results of census studies 2008-2022.

Year	number of flowering individuals	number of vegetative ind.	ratio of flowering/vegetative ind.	number of damaged ind.	total number of ind.	increasing/decreasing of total number of ind. In percentage to previous year
2008	122	66	1,85	28	188	-
2010	96	-	-	19	96	-48,94
2011	145	-	-	-	145	51,04
2012	78	52	1,50	-	130	-10,34
2013	17	46	0,37	-	63	-51,54
2014	42	11	3,82	15	53	-15,87
2015	41	4	10,25	14	45	-15,09
2016	56	23	2,43	5	79	75,56
2017	75	34	2,21	34	109	37,97
2018	117	31	3,77	10	148	35,78
2019	123	71	1,73	30	194	31,08
2020	262	107	2,45	36	369	90,21
2021	287	68	4,22	15	355	-3,79
2022	356	257	1,39	5	613	72,68

Vladimir Trifonov, 2022



More photos from 26 June 2022. All photos by Vladimir Trifonov