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## AL 1)ZYME ANALYSIS OF TWO RELICT WATER PLANTS, NELUMBO KOMAROVII AND EURIALA FEROX

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Water plants give a good opportunity for investigation of evolutionary processes in isolated populations. Two relict water plants, *Euryale ferox* Salisb. and *Nelumbo komarovii* Grossh., persisted in the south part of Far East of Russia (Primorsky Krai) as remains and witnesses of the past climate warming in Tertiary period. Now both plants exist here on the north edge of their ranges under threat of extinct ion. The species were listed in the Red Book of Russian Federation since 1988.

In this territory a few local habitats of each species are isolated each from other and from the basic geographic ranges. However, data on genetic variation of these populations of *Nelumbo komarovii* and *Euryale ferox* are absent. In this connection, the study was aimed on the evaluation of allozyrm polymorphism of *Nelumbo komarovii* Grossh. and *Euryale ferox* Salisb in natural habitats of Primor say Krai.

In total 47 specimens of N. komarovii were collected of three habitats (pond in Novogordeevka village, Anuchinsky district, Lotus lake, Khasansky district, and lake of the Putyatin island) and 17 specimens of E. ferox were collected in Lefu river. Results showed that allozyme polymorphism is absent in Russian populations N. komarovii ( $P_{95} = 0$ ; A = 1) and extremely low in E. ferox populations ( $P_{95} = 769$ ; A = 1.07). The result discussed in respect of possible influences of the species life history and modern human activity on the low level of genetic variation. Further investigation of these species with DNA techniques is planned.