in all investigated populations was noticed. Mean observed heterozygosity per locus was 0.53 and mean expected heterozygosity was 0.88 per locus. Allelic variation was high in all investigated populations. Frequencies of alleles per locus varied. Differentiation of the populations evidenced by pairwise *Fst* value. Fixation of 1 or 2 alleles were detected in all loci in all populations.

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OCCURRENCE AND POPULATION STRUCTURE OF *PONTOGAMMARUS ROBUSTOIDES* G.O. SARS, 1894 IN THE PĻAVIŅAS RESERVOIR OF THE DAUGAVA RIVER (LATVIA)

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The Ponto-Caspian gammarids and mysids were considered and introduced as valuable fish food during the Soviet time in Latvian inland waters. Introduction was realized with *P. robustoides*, *Chaetogammarus warpachowskyi* G.O. Sars, 1987*, Paramysis lacustris* (Czerniavsky, 1882)*,* and *Limnomysis benedeni* Czerniavsky, 1882. The introduction of gammarids was accomplished in Ķegums Reservoir in 1965, 1966 (Bodniece 1976; Kachalova and Lagzdin 1968). Today, investigations of amphipods and mysids in Latvian inland waters mainly are depending on environmental monitoring program of Latvia. According to results, *P. robustoides* is occurred both in the Ķegums Reservoirs, and in Pļaviņas Reservoir and also Riga Reservoir (Grudule et al. 2007; Grudule unpublished data). The aim of this study was to show how widely *P. robustoides* occurred in the Pļaviņas Reservoir of the Daugava River and to give insight into population structure. The investigation of Ponto-Caspian gammarid *P. robustoides* in the Pļaviņas Reservoir in Latvia was done in July and September, 2015. Qualitative sampling of gammarid was done by a handle net (25 x 25 cm, 500 μm) in the littoral parts of the reservoir and the mouth of small tributary Pikstere up to 0,5–1 m depth. In general, during study ~ 22 km long stretch was inventoried. *P.robustoides* was occurred in 11 sampling sites in the reservoir. The populations of *P. robustoides* consisted of both adult and juvenile specimens. In July, the large size specimens within macrophytes and medium size specimens within filamentous algae was the largest frequency. In September the ratio between specimens by size equalize, and within filamentous algae small

size specimens prevailed. A successful distribution of *P. robustoides* in the Pļaviņas Reservoir is evidently. The success of *P. robustoides* in the Pļaviņas Reservoir can be based on its favourable habitats (very slow or stagnant and shallow near-shore waters with different substrates) and environmental conditions (eutrophication of reservoir).

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DIVING BEETLE *CYBISTER LATERALIMARGINALIS* DE GEER, 1774 DISTRIBUTION IN VARIOUS MICROHABITATS IN LAKE LIELAIS BALTEZERS, LATVIA

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Diving water beetle *Cybister lateralimarginalis* De Geer, 1774 due to lack of knowledge about biology and ecology of this species, as well lack of data – species were considered to be rare locally spread in Latvia (Kalnins, 2003). First information about this species in Latvia was obtained from famous benthologist Olga Kachalova (Kachalova, 1960). This species at first was found in the Lake Rāznas, Eastern part of Latvia in the biotope formed by *Elodea canadensis* Michx. This species now is common for all territory of Latvia. But most of findings of *C. lateralimarginalis* are from Eastern part of Latvia – Latgale region.

Lake Lielais Baltezers is urban lake situated very close to Riga City and is under high anthropogenic pressure from small villages situated around the lake. More over Lake is connected by system of canals with Daugava river Estuary and Riga bay.

Data of *C. lateralimarginalis* were gathered in October 2015 and April 2016. Botle-trap with chicken meat bait inside was used for capturing diving beetle. Traps were emptied every 10 days and its content was fixed in 4 % solution of formaldehide. Overall, 80 samples were collected (20 samples in October 2015 and 60 samples in April 2016. Microhabitats in trap placement places were different between each other. Common reed (*Phragmites australis* (Cav.) Trin. Ex Steud.) were in almost sampling plots. Narrow-leaved cattail (*Typha angustifolia* L.) were found often in lakeside trap placement locations. Also in number of plant species, lake bay location microhabitats were more poorly than lakeside trap location microhabitats. In both trap placement sites bottom consisted of