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Survivorships of *Gammarus sobaegensis* (Amphipoda: Gammaridae) in different temperature and medium conditions

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Laboratory experiments were conducted to obtain data on the survivorship of Gammarus sobaegensis, a common amphipod crustacean in Korean headwater streams, in terms of two essential environmental factors, i. e. temperature and medium conditions. Various sized groups of G. sobaegensis were collected from a small spring outlet beside Gapyeong stream in Gyeonggi-do, and kept in an aquarium for about one week for experiments in the laboratory. Survivorships of G. sobaegensis were evaluated at four constant temperatures (10, 15, 20, and 25°C). Effect of rearing media (stream water: SW, tap water: TW, chironomid rearing medium: CM, and distilled water: DW) on the survivorship was evaluated at 15°C. Thirty individuals of G. sobaegensis belonging to the small-sized group (body length 2-3mm) were used and the survivorships were checked every week.

As a result, the survivorship decreased as the temperature condition increased. After 39 days, when no individual of G. sobaegensis survived at $25\,^{\circ}$ C, 18 individuals ($10\,^{\circ}$ C), 8 individuals ($15\,^{\circ}$ C), and 4 individuals ($20\,^{\circ}$ C) still survived. On the other hand, a highest survivorship was showed at TW, while a descending order of survivorship was showed at SW, CM, and DW. After 33 days, when no individual of G. sobaegensis survived at DW, 24 individuals (TW), 14 individuals (SW), and 9 individuals (CM) still survived.