

# Tardigrade diversity around Syowa Station, Dronning Maud Land in East Antarctica

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The tardigrades (phylum Tardigrada) are microscopic animals that are important members of the simple faunal assemblages found in the Antarctic environments. Although the tardigrade communities of the sub-Antarctic and the maritime Antarctic regions has been reasonably well documented, the data around Syowa Station, Dronning Maud Land in East Antarctica, is still limited. A preliminary study provided a baseline description of tardigrade species diversity and distribution pattern within the terrestrial and lake environments of the coastal regions around Syowa Station and the neighbouring inland Sør Rondane Mountains, Dronning Maud Land, giving the total recorded tardigrade diversity for this region of continental Antarctica to ten species (Tsujimoto et al., 2014). Then, an extensive survey on the tardigrade diversity was conducted during the 56th Japanese Antarctic Research Expedition (JARE) in the austral summer 2014/16 and terrestrial moss samples and freshwater lake benthos samples were collected. The extracts of each sample were examined under the dissection microscope, the tardigrades isolated, mounted on slides in Faure's solution and identified under the phase-contrast microscope. In this study, we will report the results of the ongoing study on the tardigrade species diversity found around Syowa Station. The revealed species include *Acutuncus antarcticus* (Richters 1904), *Hebesuncus ryani* Dastych and Harris 1994, *Mesobiotus* cfr. *blocki* (Dastych 1984), and the undescribed species of *Milnesium* and *Pseudechiniscus*.

## Reference

1. Tsujimoto M et al. Preliminary description of tardigrade species diversity and distribution pattern around coastal Syowa Station and inland Sør Rondane Mountains, Dronning Maud Land, East Antarctica. *Polar Biology*, 37, 1361-1367, 2014.