## 異なる生育地におけるシモフリゴケのフェノロジー特性

丸尾文乃¹、伊村智¹²¹ 総合研究大学院大学 ² 国立極地研究所

## A comparative study of the phenology of *Racomitrium lanuginosum* in two distinct habitats

Fumino Maruo<sup>1</sup> and Satoshi Imura<sup>1,2</sup>

<sup>1</sup>SOKENDAI

<sup>2</sup>National Institute of Polar Research

Population of flowering plants located at the margins of species' distribution often display reduced sexual reproduction and an increased reliance on asexual reproduction. This trend has been confirmed also in the bryophyte. One of the hypothesis to explain this phenomenon is the declining sexual reproduction at the margin of species' distribution in connection with environmental depression. To clarify the effect of environmental depression on sexual reproduction, we investigated the phenology of *Racomitrium lanuginosum* (Hedw.) Brid., dioecious moss, in two distinct habitats, snow free (Mt. Mihara, Izu Oshima, about 750 m alt.) and about 4.5 months snow covered sites (Mt. Fuji, about 2200 m alt.).

30 shoots of this species were sampled every 2 weeks throughout the growing season in 2014 in each sites. After sampling, shoots were categorized into three types, as male (with male inflorescences), female (with female inflorescences or sporophytes) and vegetative (without sexual organs). Phenological parameters on sexual reproduction, such as inflorescence formation, gametangium development, sporophyte development were surveyed. Effect of shortened growing season by snow cover on each phenological parameters will be discussed by comparison of the results from two habitats.