## **Japan Geoscience Union Meeting 2011**

(May 22-27 2011 at Makuhari, Chiba, Japan)

©2011. Japan Geoscience Union. All Rights Reserved.



APE031-12 会場:104

時間:5月25日17:15-17:30

青森県小川原湖の花粉組成による完新世の植生変遷と定量的な古気候の復元 Holocene vegetation history and quantitative reconstruction of palaeoclimate using pollen profile from Lake Ogawara

吉田 明弘 <sup>1\*</sup>, 木村裕子 <sup>2</sup>, 守田益宗 <sup>2</sup>, 竹内貞子 <sup>3</sup>, 篠塚良嗣 <sup>4</sup>, 山田和芳 <sup>5</sup>, 五反田克也 <sup>6</sup>, 米延仁志 <sup>5</sup>, 安田喜憲 <sup>7</sup> Akihiro Yoshida <sup>1\*</sup>, Hiroko Kimura <sup>2</sup>, Yoshimune Morita <sup>2</sup>, Sadako Takeuti <sup>3</sup>, Yoshitsugu Sinozuka <sup>4</sup>, Yoshikazu Yamada <sup>5</sup>, Katsuya Gotanda <sup>6</sup>, Hitoshi Yonenobu <sup>5</sup>, Yoshinori Yasuda <sup>7</sup>

 $^1$  東北大学植物園,  $^2$  岡山理科大学理学部,  $^3$  柳町自然研究所,  $^4$  北海道大学大学院環境科学院,  $^5$  鳴門教育大学,  $^6$  千葉商科大学政策情報学部,  $^7$  国際日本文化研究センター

<sup>1</sup>Botanical Garden, Tohoku University, <sup>2</sup>Faculty of Science, Okayama University o, <sup>3</sup>Yanagimachi Laboratory of Natural Studie, <sup>4</sup>Graduate School of Environmental Science, <sup>5</sup>College of Education, Naruto University, <sup>6</sup>Faculty of Policy Informatics, Chiba Uni, <sup>7</sup>International Research Center for Japane

High-resolution climate records in terrestrial area provide important information about the mechanism of climate teleconnection via atmosphere and ocean circulation. Climate change during the Holocene was characterised by short-lived and small magnitude. Some geological evidence suggests that cooling in the early Holocene triggered by catastrophic release of fresh water stored in glacial Lake. In particular, the 8.2 ka cooling event seems to have had an immediate and large-scale impact throughout the North Atlantic region. However, high-resolution climate data are spares in the mid-latitudinal zones of western Pacific, to discuss the picture on the hemispheric scale.

The East Asian monsoon is one of the most important climatic boundaries in understanding the global climate teleconnection. The Pacific side of northeastern Japan, especially, is a suitable location for studying the East Asian monsoon, because this area is strongly influenced by the Siberian, Pacific, and Okhotsk high-pressure systems. Therefore, the palaeoclimate records at this region are expected to detect the strength of winter and summer East Asian monsoon.

As preliminary report, we present the results of low-resolution pollen profile from a continuous sediment cores at Lake Ogawara, northeastern Japan. We discuss vegetation changes and climate during the Holocene using pollen profile, in attempt to better understand past monsoon activity.

キーワード: 花粉分析, 植生変遷, 古気候復元, 完新世, 小川原湖

Keywords: pollen analysis, vegetation history, pollen-based climate reconstruction, Holocene, Lake Ogawara