

## インドネシア西ジャワにおける古気候復元のためのスンカイの年輪の $\delta 18\text{O}$ プロキシの評価

### Assessment of Sungkai tree-ring $\delta 18\text{O}$ proxy for paleoclimate reconstruction

原田 麻央<sup>1\*</sup>; 渡邊 裕美子<sup>1</sup>; 中塚 武<sup>2</sup>; 田鶴 寿弥子<sup>3</sup>; 堀川 祥生<sup>3</sup>; バンバン スビヤント<sup>4</sup>; 杉山 淳司<sup>3</sup>; 津田 敏隆<sup>3</sup>; 田上 高広<sup>1</sup>

HARADA, Mao<sup>1\*</sup>; WATANABE, Yumiko<sup>1</sup>; NAKATSUKA, Takeshi<sup>2</sup>; TAZURU, Suyako<sup>3</sup>; HORIKAWA, Yoshiki<sup>3</sup>; BAMBANG, Subiyanto<sup>4</sup>; SUGIYAMA, Junji<sup>3</sup>; TSUDA, Toshitaka<sup>3</sup>; TAGAMI, Takahiro<sup>1</sup>

<sup>1</sup> 京都大学大学院 理学研究科, <sup>2</sup> 名古屋大学 環境学研究科, <sup>3</sup> 京都大学 生存圏研究所, <sup>4</sup> インドネシア科学院

<sup>1</sup>Graduate School of Science, Kyoto University, <sup>2</sup>Graduate School of Environmental Studies, <sup>3</sup>Research Institute for Sustainable Humanosphere, Kyoto University, <sup>4</sup>Indonesian Institute of Sciences

We measured annual  $\delta 18\text{O}$  variations of two sungkai trees that were collected in the same area as previous study, in order to assess the reproducibility of sungkai  $\delta 18\text{O}$  as paleoclimate proxies. Two sungkai  $\delta 18\text{O}$  variations has a significant correlation ( $r = 0.80$ ;  $P < 0.001$ ) with each other and also with the previous analysis, suggesting that  $\delta 18\text{O}$  values of sungkai are affected by external climatic factors. The annual  $\delta 18\text{O}$  of SungkaiNAN7 has significant, positive correlations with temperature, sunlight hours and air pressure whereas it has significant, negative correlations with relative humidity and SOI. Moreover, the seasonal  $\delta 18\text{O}$  variation acquired during severe drought of 1997-98 El Nino event shows that the maximum  $\delta 18\text{O}$  value around 1997 latewood corresponds to rainfall/relative humidity minimum and temperature/sunlight hours/air pressure maximum with a significant time lag.

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