

化石種ヒメハリゲヤキの材化石の新産地

メタデータ	言語: eng 出版者: 公開日: 2019-10-04 キーワード (Ja): キーワード (En): 作成者: メールアドレス: 所属:
URL	https://doi.org/10.24517/00055709

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 International License.



- (CRAMER) GOTHAN in the East Asia. J. Geol. Soc. Tokyo. 41: 9-13 (in Japanese).
- . 1936. Studies on fossil woods from Japan and adjacent lands, I. Some Jurrassic woods from Japan and Manchoukuo. Sci. Rep. Tohoku Imp. Univ. Ser. 2 (Geology), 18: 267-298.
- SUZUKI, M. GOTO, M. and AKAHANE, H. 1982. Some fossil woods from the Kuruma Group of Toyama and Niigata Prefectures. Ann. Sci. Coll. Liberal Arts, Kanazawa Univ. 19: 43-61.
- TANAKA, R. 1926. Fossil woods found in Tetori Group. J. Geol. Soc. Tokyo. 33: 370-387 (in Japanese).
- VOGELLEHNER, D. 1968. Zur Anatomie und Phylogenie mesozoischer Gymnospermenhölzer, 7. Prodoms zu einer Monographie der Protopinaceae, II. Die protopinoiden Hölzer aus Jura. Palaeontographica. B124: 125-162.
- WATARI, S. 1960. On some structures and affinity of *Xenoxylon latiporosum*. J. Fac. Sci. Univ. Tokyo, Sect. III, 7: 511-521.

摘 要

石川県白峰村の国指定特別天然記念物「手取川流域の珪化木産地」調査委員会による調査で手取統赤

岩垂層群（下部白亜紀）から新たに見つかった直立樹幹4本を含む7点の材化石についてその材構造を調べ、同定を行った。その結果、いずれもが CRAMER がグリーンランドのジュラ紀層から記載した針葉樹類原マツ科ザイシツフメイ属の *Xenoxylon latiporosum* であることが分かった。嶋倉巳三郎が1934と1936年にこの地で見つかった材化石を上述の種に同定して以来、1951年に小倉ら、1960年に亘理がやはりこの地の材化石を同定して嶋倉と同じ結論に達していた。ところが1968年に中生代の針葉樹材化石をまとめた VOGELLEHNER は嶋倉の1936年の記載に基づいて *X. japonicum* という新種を立てた。この嶋倉の記載には白峰村桑島の材化石とともに韓半島北部の平壤産のものなどが含まれており、どれとどれが *X. japonicum* に該当し、それ以外のは *X. latiporosum* のままであるのかが不明のままであった。筆者らは東北大学理学部地質古生物教室及び東京大学総合研究資料館に所蔵してある嶋倉、小倉ら、亘理の用いた標本を再観察し、*X. japonicum* に該当するのは嶋倉の平壤産の1点のみであること、また白峰村及び白山周辺から得られた材化石は全て *X. latiporosum* であることを確かめた。

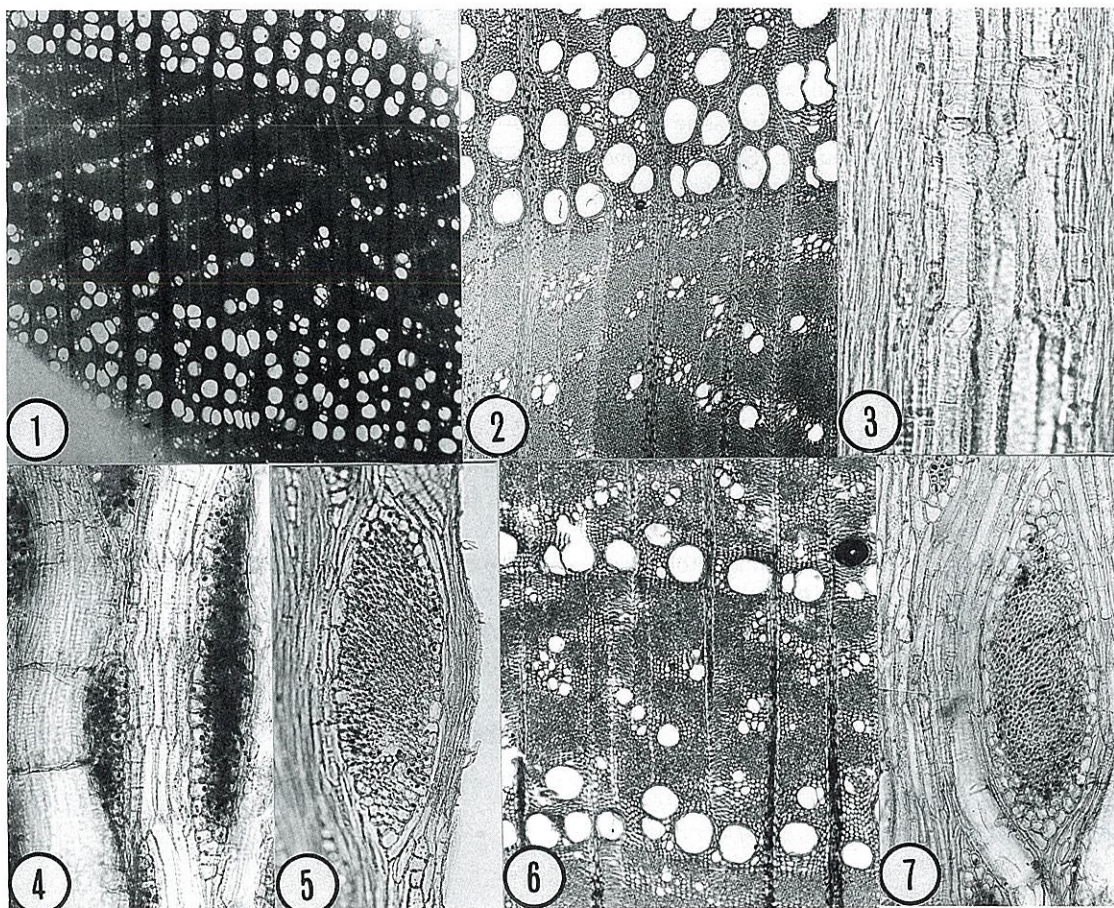
(Received August 25, 1992)

○ Mitsuo SUZUKI* and Shuichi NOSHIRO** : Further Occurrence of *Hemiptelea mikii* Fossil Woods from the Pleistocene of Japan 化石種ヒメハリゲヤキの材化石の新産地 (鈴木三男*・能城修一**)

Hemiptelea mikii MINAKI is a fossil species of the Ulmaceae, of which fruits were found from the Early to the Late Pleistocene strata of several localities in Japan, and of which woods were from Kitaegota Site of Tokyo (MINAKI *et al.* 1988). The extant *Hemiptelea* is monotypic and *H. davidii* (HANCE) PLANCH. is distributed in Korea and northern and central China. During our further researches on Pleistocene fossil woods, we found two new localities of the species in Saitama and Ishikawa Prefectures as follows: **Locality 1**: Specimen No. W14-727 which was collected at Oiseyama Site, Mikashima, Tokorozawa, Saitama Prefecture (Tsuzurairi Formation) (NOSHIRO and SUZUKI, 1991). **Locality 2**: Specimen No. Saigawa-1, which was collected by Mr. Yuzuru ONO in 1988 on the river bed of Saigawa between two bridges of Saigawa-Ohashi and Sakurabashi, Kanazawa, Ishikawa Prefecture (Utatsuyama Formation).

These fossils have prominent anatomical features as follows: distinct ring porosity (Figs. 1, 2, 6), abrupt transition from early- to late-wood (Figs. 1, 6), sporadic larger pores in the late-wood (Figs. 1, 2, 6), large and low multiseriate rays with sheath cells (Figs. 5, 7), small vessel with simple perforations and spiral thickenings (Fig. 3), and storied fusiform elements (Fig. 4). All of these and other characters agree with the original specimen of this fossil species. The exact age of Tsuzurairi and Utatsuyama Formations is not clear. But it may be said that the age is the Middle or Early Pleistocene, because the former is roughly estimated as about 0.3 Ma (Million years ago) (TSUJI, 1991), and that of latter is considered between 0.59 and 0.83 Ma (SHIMIZU, 1987MS; TAKAYAMA *et al.* 1988). Although the fruit fossil is not yet found in these two new localities, the occurrence of fossil woods will indicated the more wide distribution of this species in the Pleistocene age of Japan.

ヒメハリゲヤキ *Hemiptelea mikii* MINAKI はニレ科の絶滅種で、関東と近畿の更新統から出土した果実と材化石を元に記載されたものである (MINAKI *et al.* 1988)。筆者らのその後の化石研究の過程において埼玉県所



Figs. 1-7 Photomicrographs of *Hemiptelea mikii* fossil woods. 1-5: Specimen No. Saigawa-1. 6 and 7: Specimen No. W14-727. 1, 2, 6: cross section; 3: radial section; 4, 5, 7: tangential section. 1: $\times 17$; 2, 6: $\times 40$; 3: $\times 200$; 4, 5, 7: $\times 100$.

沢市のお伊勢山遺跡のつづら入層（能城・鈴木，1991）と金沢市犀川の河床の卯辰山層から新たに見つかった。これらの材構造は Figs. 1-7 に示したようにヒメハリゲヤキの特徴に完全に一致し、これによりヒメハリゲヤキが更新世に広く北陸まで分布していたことが明らかになった。

References

- MINAKI, M., NOSHIO, S. and SUZUKI, M. 1988. *Hemiptelea mikii* sp. nov. (Ulmaceae), fossil fruits and woods from the Pleistocene of central Japan. *Bot. Mag. Tokyo.* **101**: 337-351.
- NOSHIO, S. and SUZUKI, M. 1991. Fossil Woods. In: TAKIGUCHI, H. (ed.), *Researches on Oiseyama Site, Vol. 2*: 35-39, Waseda University (in Japanese).
- SHIMIZU, S. 1987MS. History of volcanic activity during Pliocene and Pleistocene in central Japan basing on the Potassium-Argon method. Master Thesis, Fac. Sci., Kanazawa Univ. (in Japanese).
- TAKAYAMA, T., KATO, M., KUDO, T., SATO, T. and KAMEO, K. 1988. Carcareous microfossil biostratigraphy of the uppermost Cenozoic formations distributed in the coast of the Japan Sea-Part. 2. Hokuriku Sedimentary Basin- J. Jap. Assoc. Petrol. Tech. **53**: 9-27 (in Japanese).
- TSUJI, S. 1991. The outline of geography. In: TAKIGUCHI, H. (ed.), *Researches on Oiseyama Site, Vol. 2*: 3-6, Waseda University (in Japanese).
- (* College of Liberal Arts, Kanazawa University, Kanazawa 920, JAPAN 〒920 金沢市丸の内1-1 金沢大学教養部; **Forestry and Forest Products Research Institute, P. O. BOX 16, Tsukuba 305, JAPAN 〒305 筑波農林団地郵便局 私書箱16号 森林総合研究所)