

Supplemental description of *Pityosporites* from the Uge

Member of the Taneichi Formation, Northeast Japan

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Abstract

Pityosporites tohokuensis n. sp. from the Santonian Uge Member of the Taneichi Formation at Taneichi is described and re-illustrated supplementally in this paper.

Introduction

The authors (1990) described and illustrated already many palynomorphs from the Santonian Uge Member of the Taneichi Formation outcropping in a long and narrow belt area along Rikuchu Coast in northeastern Honshu, Japan. At that time, they didn't describe carelessly *Pityosporites tohokuensis* n. sp., in spite of presentation of its photos. By reason of their such mistake, *Pityosporites tohokuensis* n. sp. is described and re-illustrated supplementally in this paper.

Description of *Pityosporites tohokuensis*

Pityosporites tohokuensis n. sp.

Pl. 1, figs. 1 - 5 (or Takahashi & Sugiyama, 1990 :

pl. 65, figs. 3, 4, 8 ; pl. 66, figs. 3, 6)

Description : Bisaccate, pinoid pollen grains. Outline spheroidal in polar view, subprolate in side-lateral view, and suboblate in oblique view. Sacci parvi-

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saccate, moderately or roughly reticulate. Central body subprolate in polar and oblique views, finely punctate or foveolate; cap 2.5–3.5 μm thick, intrarugulate. Distal furrow between sacci laevigate or finely punctate, relatively narrow. Ventral root more or less concave or convex.

Measurements : Overall width of grain : 60–77 μm .

Overall length of grain : 54–68.7 μm .

Overall height of grain : 56 μm .

Width of central body : 48–58 μm .

Length of central body : 54–67 μm .

Height of central body : 39 μm .

Width of sacci : 24–34 μm .

Length of sacci : 47–57 μm .

Occurrence : Uge Member; south of Kanuka (C31), Uge harbor (A) (C39), and Uge harbor (B) (C40).

Holotype : Pl. 1, figs. 5a, b (or Takahashi & Sugiyama, 1990 : pl. 65, figs. 4); overall width of grain 77 μm , overall length of grain 68.7 μm , width of central body 58 μm , length of central body 67 μm , width of saccus 31 μm , length of saccus 54 μm ; exine (cap) 2.5 μm thick; intrarugulate; slide C 39–a.

Name derivation : *tohokuensis* = from Tohoku district of Honshu (Japan).

Remarks : Central body of *Pityosporites tohokuensis* n. sp. is morphologically subprolate in polar view and the new species is distinguished from *Pityosporites siegburgensis* Takahashi & Jux which possesses subprolate central body in having much larger size of grain and central body.

Botanical affinity : Pinaceae, *Pinus*.

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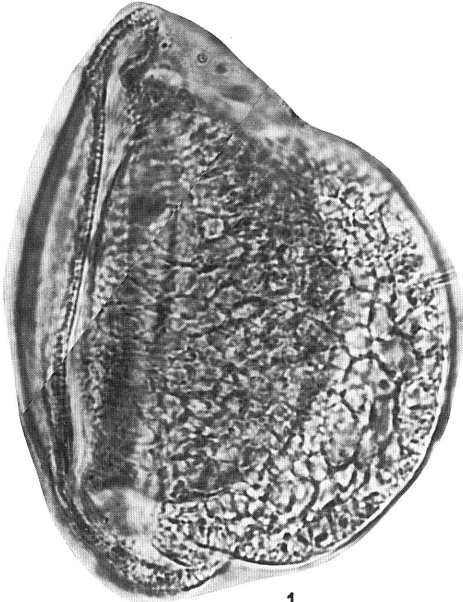
Explanation of plate 1

(All figures magnified X 800 unless otherwise mentioned)

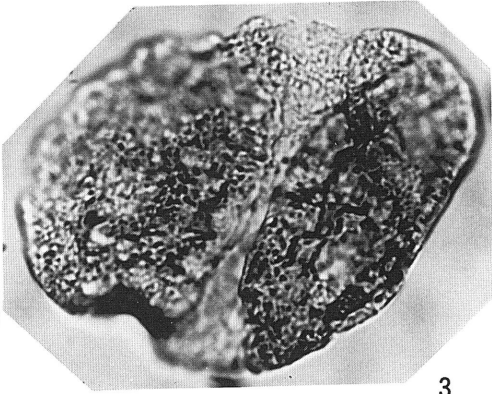
Figs. 1-5. *Pityosporites tohokuensis* n. sp.

Fig. 1 : Slide C 40-b, X 1000 ; figs. 2, 3, 4 : slide C 31-b ;

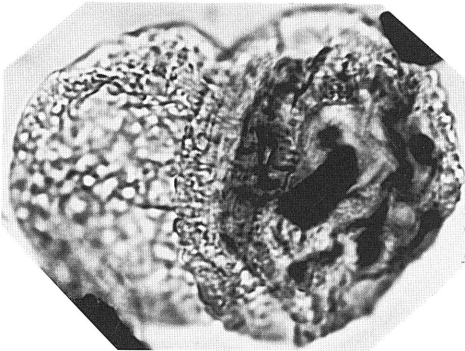
figs. 5 a, b : holotype, slide C 39-a ; fig. 5 a : X 600.



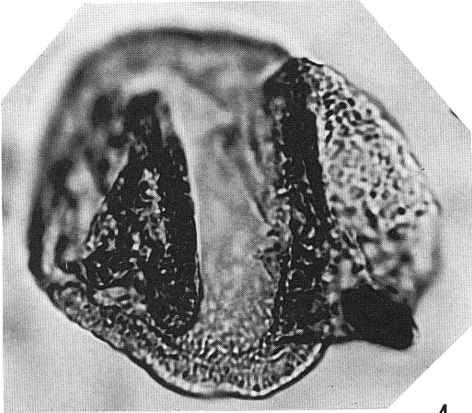
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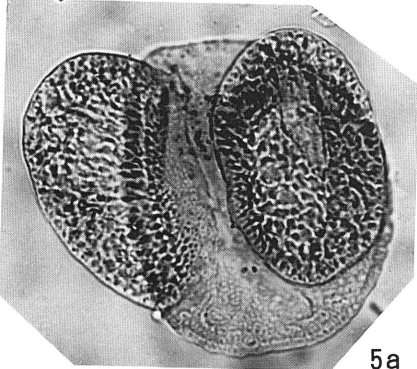
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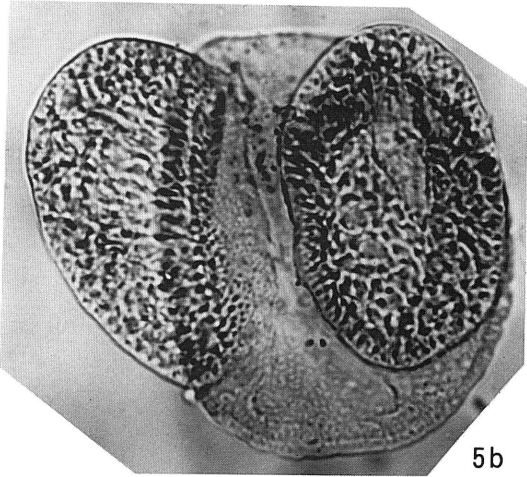
2



4



5a



5b