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CERATOPTERIS TAIWANENSIS HUANG SP. NOV.[1]

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Spores of *Ceratopteris taiwanensis* are characterized by being trilete, ellipsoidal, the proximal face flat, the distal face subconical, 110×155 μ. Laesural arms almost straight, nearly extending to the joints of ridges, 22 μ long, with margo of 1 μ wide. Exine striate, about 0.4 μ thick, the ridges about 6—7, dichotomously branched, jointed at three points, and forming 6—7-concentric triangles around the proximal face, and transversally parallel striate on the distal face, 3—5 μ wide, the grooves 1—2 μ wide.

Type locality: Chuhuangkeng, Miaoli County, Taiwan, ROC.
Type horizon: Yutengping Sandstone Member, Miocene.
Type slide: 58-2R
Type photo: 64:1-2
Date of collection: September 17, 1974.
Nomenclature state: The nomenclature for the fossil genus of *Ceratopteris* is *Magnastriatites* Germeraad, Hopping and Muller (1968), therefore, this taxon can also be named *Magnastriatites taiwanensis*.

There are four or five living species of *Ceratopteris* which belong to the family Parkeriaceae (Chiang, 1975; Erdtman, 1957; Erdtman and Sorsa, 1971). These are widely distributed in the tropical and subtropical regions of the world, being found in: CENTRAL AMERICA (Mexico, Guatemala, ElSalvador, Panama and the West Indies), SOUTH AMERICA (Ecuador, Columbia, Venezuela, Guiana, Brazil, Paraguay and Argentina), NORTH AMERICA (Florida to Louisiana), AFRICA (Sierra Leone, Liberia to Angola and Madagascar), and ASIA (Ceylon, India to Malaysia, and Vietnam, and through the Philippines south to Indonesia, and Australia, east to Hawaii, and north to Taiwan, mainland China, and Japan). But not many fossil spores of *Ceratopteris* have

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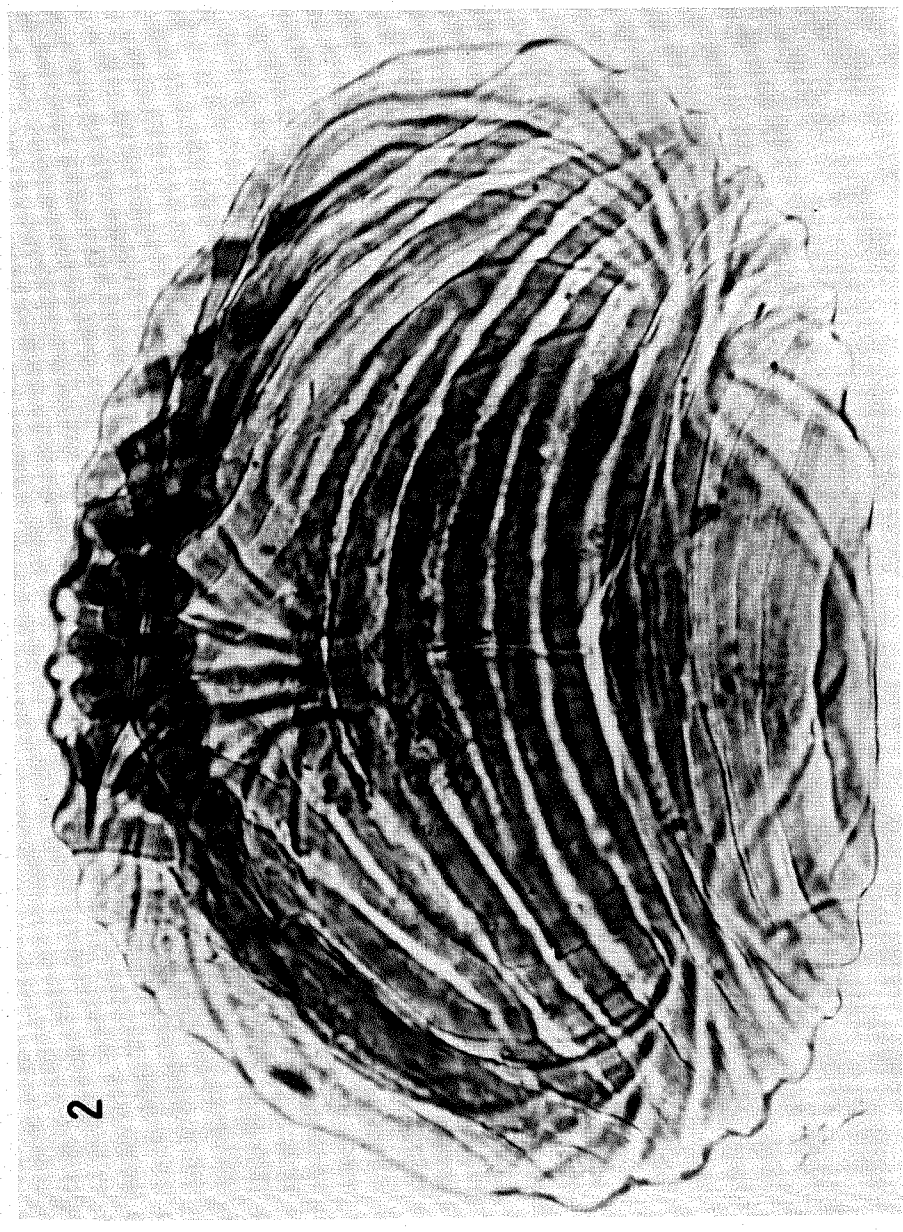
Fig. 1-2. Spores of ***Ceratopteris taiwanensis Huang***, ×1,000.
1. Proximal face, 2. distal face.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been reported (Chung and Huang, 1972; Germeraad *et al.*, 1968; Kremp and Kawasaki, 1972; Nakamura, 1972; Sohma, 1973; Tai, 1970). The oldest fossil *Ceratopteris* was described from the lower Cretaceous, lower Hauterivianan, Sandstones in the central regions of the U.S.S.R. as *Ceratopteris krymensis* Bolkhovitina in 1935 (Kremp and Kawasaki, p. 317, 1972). Germeraad *et al.* in 1968 described *Magnastriatites howardi* for fossil spores of *C. thalictroides* from the Tertiary sediments in Columbia. In Japan, *Ceratopteris* spores were found in the Tertiary and Postglacial sediments, and we have reported *Ceratopteris* from Taiwan as being present from 380,000 to 4,500 B.P. (Chung and Huang, 1972). Our previously reported spores were probably of *C. thalictroides.* This new species was found in the older sediment of Miocene deposit, and can be readily distinguished from other known species by its ellipsoidal shape on the proximal face. The fossil spores of *Magnastriatites howardi* were also recently found in the sediments of Peliao Sandstone Member, Miocene of Taiwan (unpublished data).

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臺灣水蕨(水蕨科)

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根據臺灣省苗栗縣後龍溪出磺坑，中新世魚籐坪砂岩段的化石孢子描述一新種——"臺灣水蕨"。該新種的孢子形狀爲橢圓形而可與已知水蕨屬的任何種類的孢子識別。