ABSTRACT. A new species of cycad, Ceratozamia alvarezi (Zamiaceae) from Chiapas, is described and illustrated. This species has affinities with C. matudai from Chiapas and C. sabatoi from Queretaro and Hidalgo. It differs from these species with regard to trunk, leaf habit, and male and female cones. It differs from C. norstogii, also from Chiapas, in that the latter is a much larger unbranched plant with a spirally twisting leaf rachis.

RESUMEN. Se describe e ilustra una nueva especie, Ceratozamia alvarezi (Zamiaceae). Esta especie presenta afinidad con C. matudai y C. sabatoi de Queretaro e Hidalgo. Esta especie difiere de las anteriores por la hoja, hábito de los estróbilos y morfología del tronco. También difiere de C. norstogii dado que la última es una planta más grande, no ramificada y la raquis torcida espiralmente.

During the course of botanical explorations in one of the natural areas of Chiapas that has recently been decreed as a Biosphere Reserve, we collected a species of Ceratozamia with a unique combination of trunk, leaf, and cone characters. We believe that the new species is close to Ceratozamia matudai Lundell. Specimens of the new plant and C. matudai were cultivated under the same conditions for comparison purposes for a period of two years, in which time new leaf flushes and cones occurred. The plants under cultivation continued to present the same characteristics as those of the natural habitat. The cones of Ceratozamia alvarezi differed from those of C. matudai as well as those of C. norstogii Stevenson, which also is from Chiapas. C. norstogii also differs in its much larger habit, and in having an erect non-branching trunk and leaves with a spirally twisted rachis.

Ceratozamia alvarezi Perez-Farrera, Vovides & Iglesias, sp. nov. TYPE: Mexico. Chiapas: Sierra Madre of Chiapas, 4 Mar. 1996, M. A. Perez-Farrera 889 (holotype, CHIP; isotypes, F, MEXU, MO). Figure 1.

Planta trunco subgloboso ad cylindricum semihypogaeo ad hypogaeum, ramoso, 10-50 cm alto; cataphyllis lanatis triangularibus, stipulatis. Folia pinnata; petiolo 14—42 cm longo; rhachidi 25-66 cm longa; foliolis oppositis ad subopposita, 24-62-jugis, lineari-lanceolatis. Strobilus masculinus lineari-cylindricus 11—31 cm longus pedunculo tomentoso 4—5 cm longo insidens; strobilus femininus 14.5—19 cm longus pedunculo tomentoso 6.5—6.5 cm longo insidens; seminibus 1.7—2.5 cm longis.
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0.6—0.9 cm wide. Bicormate in the distal part, with the fertile portion covering 1/3 of the abaxial surface excluding the horns. Microsporangia numerous in sori of 3—4, longitudinally dehiscent. Megastrobili cylindrical to barrel-shaped, olive green upon emergence, brown ochre when mature, 14.5—19 cm long, 5.7—10.5 cm diam., peduncle tomentose, 4.5—6.5 cm long, 13—22 cm diam. Megasporophylls numerous, peltate, inserted spirally on the cone axis forming apparent vertical rows, 2.8—4.5 cm long, 1.5—2.9 cm wide. Distal end hexagonal, bicormate, with brown ochre tomentum on the lobate part around the horns. Seed ovate, sarcotesta white when immature and creamy yellow when mature, 1.7—2.0 cm, 0.6—0.9 cm wide, bicornate in the distal part, with the fertile portion covering 1/3 of the abaxial surface, sclerotesta smooth and beige in color, 17—25 cm long, 1.7—2.0 cm diam. with 7—9 radical ridges. Chromosome number 2n = 16.

Paratype: MEXICO. Chiapas: Sierra Madre de Chiapas, 2,945 m, Perez-Farrera 1260 (K). Other specimens examined: MEXICO. Chiapas: Sierra Madre de Chiapas, Perez-Farrera 46, 64 (CBG), Castillo-Hernandez 624, 445 (CHS), Breiden 70956, 60309 (CAS).

Ceratozamia alvarezii principally occurs in oak forest as described by Rzedowski (1978) at an altitude of 950 m. This forest has an overstory of Quercus maquinilla Nee, Quercus elliptica Nee, and Pinus noverca Schiede above a shrubby layer of Pinus ooacarpa Regel. The herbaceous layer consists mainly of Canavalia hirsuta (Martens & Galeotti) Standley and Calliandra houstoniana (Mill) Standley. The herbaceous layer consists mainly of Canavalia hirsuta (Martens & Galeotti) Standley. The herbaceous layer consists mainly of Canavalia hirsuta (Martens & Galeotti) Standley. The herbaceous layer consists mainly of Canavalia hirsuta (Martens & Galeotti) Standley. The herbaceous layer consists mainly of Canavalia hirsuta (Martens & Galeotti) Standley. The herbaceous layer consists mainly of Canavalia hirsuta (Martens & Galeotti) Standley. The herbaceous layer consists mainly of Canavalia hirsuta (Martens & Galeotti) Standley. 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