Spores 10–12 $\mu \times 5 \mu$, oblong; stipe pale pruinose above, brown-fibrillose at base. I. infelix Peck 10. Spores stellate-spinulose; pileus 3-5 cm. I. asterospora Quelet Spores tuberculate or nodulose. II. Spores angular, not tuberculate or spiny; pileus 2-2.5 cm. I. cicatricatus El. & Ev. 11. Pileus yellowish-brown or lilac-brown with the disc white. I. albodisca Peck Pileus uniform in color or the disc darker. 12. 12. * Pileus large, 3-5 cm.; spores obtuse-tuberculate, 8 μ. I. margarispora (Berk.) Sacc. Pileus smaller, 1-2.5 cm. 13. 13. Pileus dark brown, spores about $8 \times 6 \mu$. I. umboninota Peck Pileus yellowish-brown, the umbo black-brown; spores $10-13 \times 5-6 \mu$. I. radiata Peck Section VELUTINAE I. Spores smooth. 2. Spores rough, angular or tuberculate. 4. 2. Spores 10–12 $\mu \times 5$ –6 μ ; pileus pale-fuscous, umbo darker. *I. agglutinata* Peck Spores $8 \times 5 \mu$. 3. 3. Stipe whitened by a silky coating; pileus mouse-color, tinged lilac. 1. murino-lilacina El. & Ev. Stipe glabrous, apex farinose; pileus white, yellow, lilac or brown. I. geophylla (Sow.) Gillet 4. Pileus white or whitish. 5. Pileus some shade of brown. 6. I. commixta Bres. 5. Pileus 2-3 cm.; spores 10 \times 7 μ . 1. paludinella Peck Pileus 1–2 cm.; spores $8 \times 5 \mu$. 6. Pileus gray, disc blackish-brown, 8–16 mm.; spores 7–8 $\mu \times 5 \mu$. I. nigrodisca Peck Pileus uniform in color or nearly so. 7. 7. Pileus pale chestnut to ochraceous; spores subglobose, $7-8\mu$. I. subexilis (Pk.) Sacc. Pileus umbrinous; spores 12 μ . I. sabuletorum (B. & C.) Sacc. Section VISCIDAE

I. Pileus white or whitish; lamellae white to fuscous. I. vatricosa (Fr.) Quelet I. trechispora (Berk.) Sacc. Pileus yellowish; lamellae pinkish-gray.

SHORTER NOTES

A FERN NEW TO THE UNITED STATES. — A specimen collected in the "Cedar Hammock" of Sumter County, Florida, by Fred-

* Numerous forms occur in the neighborhood of New York City that do not agree with any of these three. They doubtless represent several undescribed species.

erick L. Lewton, September 4, 1894, and preserved in the herbarium of the New York Botanical Garden is to be referred to Asplenium auritum Sw., a rather variable West Indian and Middle American species, not reported hitherto from the United States. The sheet in question is not of the typical Jamaican form, but is identical with Porto Rican material represented by Sintenis, No. 4616, which does not, however, seem specifically distinct.

WILLIAM R. MAXON.

Washington, D. C.

REVIEWS

Evolution and Adaptation

The reader in search of evidence corroborative of the origin of species by natural selection, or by direct adaptation will find but little comfort in Professor Morgan's recent book on evolution and adaptation.*

This author concludes that "Animals and plants are not changed in this or that part in order to become better adjusted to a given environment, as the Darwinian theory postulates." He holds that natural selection is not the moulding force that directs the development, or the origin of new forms, since among other proofs he points out that many have organs that are much less perfect than necessary, or more perfect than required by existence in a given environment.

Although new species are supposed to arise by the cumulation of minute fluctuating variations, according to the theory of natural selection, yet it is recalled that artificial selection, taking advantage of such variations, has never resulted in the formation of a new species although this method has been skilfully and rigidly applied for long periods of time. It is likewise pointed out that actual indisputable proof that any acquired character is capable of being inherited has not yet been brought forward. This is a phase of the subject comparatively easy of proof if true, and Professor Morgan is certainly justified in holding that mere asser-

^{*}Morgan, T. H. Evolution and Adaptation. 8vo. pp. xiii + 470. f. 1-7. 1903. The Macmillan Company, New York.