

branches darken and the spores become larger, darker, and some of them septate. Their shape is mostly oblong, slightly pointed at one end, truncate at the other, showing the circle of attachment. Continuous spores vary from $1\frac{1}{2} \times 1$ to $1\frac{1}{2} \times 4 \mu$, septate ones from 10×3 to 30×6 — 8μ . Under a high power all except the smallest are seen to be rough or minutely echinulate. The hyphae are sub-fasciculate, simple or septate, sub-geniculate, varying in colour from hyaline to olivaceous, sub-dentate or entire above, 40 — 80×3 — 6μ .

On pea-pods, communicated by Dr. J. Fletcher. Ottawa, from South Vancouver, B.C., and by B. C. Buffum, Laramie, Wyoming. Aug., 1896. Herb. D., No. 2395.

This fungus was so injurious in the British Columbia locality that the crop was not threshed.

CLADOSPORIUM ACUTUM, E. & D.

Black tufts, $\frac{1}{2}$ — 1 mm. diam., thickly scattered over the lower surface of the leaf, sparingly confluent. Fertile hyphae caespitose, olive brown, nearly straight, 3 — 5 septate, 80 — $110 \times 3\frac{1}{2}$ — 4μ , abruptly and mostly obliquely pointed at the apex. Conidia elliptic, 1-septate, becoming brownish, 10 — 15×6 — 8μ .

On fallen ash leaves, London, Can., Oct., 1896. Herb. D. No. 2441.

CERCOSPORA CARICINA, E. & D.

Tufts punctiform, minute, seriate between the parallel ribs of the leaf. Hyphae caespitose, mostly continuous, brown, notched and crooked above, 15 to 25×3 to $3\frac{1}{2} \mu$. Conidia slender, obclavate-cylindrical, hyaline, continuous, 34 — 73 (35 — 50) $\times 3 \mu$.

The leaves of the host are at first dotted with brown specks and blackened, finally becoming dead and then lighter in colour.

On leaves of *Carex rosea*, London, Can., Aug., 1896. Herb. D., No. 2390.

CERCOSPORA LESPEDAZÆ, E. & D.

Spots irregular, red, bounded by the veinlets, 2 to 5 mm. Tufts of conidia epiphyllous, hyphae continuous, pale brown, 10 — $25 \times 4 \mu$. Conidia clavate-cylindrical, 35 — $50 \times 4\frac{1}{2} \mu$, 1 — 5 -septate.

On leaves of *Lespedeza capitata*, Michx., London, Can., July, 1893. Herb. D., No. 2135; N.A.F., No. 3094.

SPIRÆOPSIDÆÆ.

PHYLLOSTICTA HERACLEI, E & D.

Spots large, 1 — 2 cm., reddish brown, indefinite, finally confluent and covering a large part of the leaf, which becomes pale and dry. The spots at first are margined with a faint yellowish zone. Perithecia mostly epiphyllous, nearly black, sub-erumpent, 110 — 125μ . Spores hyaline, oblong, continuous, $3\frac{1}{2} \times 1\frac{1}{2} \mu$.

On leaves of *Heracleum lanatum* Michx., London, Can., September, 1892, Herb. D., No. 2026.

PHYLLOSTICTA HISPIDA, E. & D.

Perithecia gregarious, innate, globose, with a broad, round opening, small (75 — 80μ) visible on both sides of the leaf, but more distinct and prominent below. The leaf is clouded with dark, indefinite patches, but there are no distinct spots. Sporules oblong-cylindrical, obtuse, 3 — $4 \times 1\frac{1}{2} \mu$.

On leaves of *Smilax hispida*, Muhl., London, Can., Sept.-Oct., 1896. Herb. D., No. 2424.

PHOMA PANICULATA, E. & D.

Perithecia scattered, convex, hemispherical, about $\frac{1}{2}$ mm. in diam., covered by the epidermis which is raised into little black blisters and finally irregularly rup-