A NEW SPECIES OF GRAPHIUM.

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This fungus was first collected near Ithaca, New York, September 2, 1902. It was found growing on dead spots in living leaves of *Hamamelis virginiana* L. Since the species of this genus are largely saprophytic, a close study has been made to determine definitely its nature. After years of collecting and careful observation, it seems to be unquestionably a parasite. In fact one is able to distinguish it by the character of its spots, though there are a number of somewhat similar spots on these leaves produced by other causes. There may be some question as to the mode of entrance into the leaf, but there is no doubt as to its destruction of leaf tissue. Some observations in recent years suggest that it enters through injuries of various kinds, and then spreads rapidly through the living tissue.

Of the 86 species described in Saccardo, only six are said to be parasitic. Of these, four are reported on living leaves. *Graphium pallescens* (Fuck.) Magn. is parasitic on *Stellaria nemorium* in Saxony; *Graphium Geranii* Vogl., on living leaves of *Geranium molle; Graphium Volkartianum* P. Magn., on living leaves of *Potentilla aurea* in Switzerland. One species, *Graphium rhizophilum* Pat., occurs on living roots in Venezuela. Another species, *Graphium pelitnopus* (Corda) Sacc., is parasitic on Sphereacea and Tubercularia, which in turn grow upon decaying Aesculus fruits. The only parasitic American species is *Graphium gracile* Pk. found on leaves of *Rubus strigosus. Graphium Geranii* Vogl. may be this species.

GRAPHIUM HAMAMELIDIS *n. sp.*

Spots .5 to 4 cm., circular to oval, deep brownish-drab with a broad, dark, vinaceous drab (or brown) outer boundary, center sooner or later falling out, leaving a lace-work of the veins; *synnemata* mostly epiphyllous, erect, simple, gregarious, often growing from the veins, 500 to 825 microns tall, dark-brown but paler just below the head, diameter at the base 20 to 50 microns, tapering to 10 to 15 microns just below the heads which average about 50 microns in diameter, attached to the leaf by an abruptly broadened base 50 to 100 microns in diameter, individual hyphae very slender and firmly agglutinated, brown, heads spherical, pale in color, with abundant slime; *spores* naviculate to oblong, hyaline, 5 to 7 by 2 to 3 microns.

On living leaves of *Hamamelis virginiana* L. Common in southern Indiana, where it has been collected for many years. Collected also in Ohio and New York. Type specimen 3,852, Monroe County, Indiana, August, 1912. 4,082, Clark County, Indiana, August 14, 1923. 810 at Ithaca, New York, September 2, 1902.

This beautiful species seems to be very common, particularly in the southern half of Indiana. In Monroe and Brown counties, it is to be found everywhere.

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