

chooses *Heracleum lanatum*, which is pungent, juicy and of rank growth, quite as opposite to the dry, stringy fern-stem as one could well imagine. *Heracleum* grows in great perennial clusters in many places at Rye, some having been undisturbed for a quarter of a century and never burned over. Even with such ideal conditions, and in a search that has gone on regularly for twelve years to detect the borings of *Harrisii*, there has never once appeared a *Papaipema* larva working in it, nor has this species occurred from any other local source. In practically the same locations *Pteris* grows abundantly, each year tenanted by goodly colonies of its particular form. Evidently, at the present time there is no change of food-plant. So the experiment of introducing the fern-borers at various stages to a *Heracleum* diet, which is easy in its hollow stalk, was repeatedly made, and always with negative results. Cross-breeding was not attempted for lack of material, and such artificial resorts hardly confirm natural conditions. While this diagnosis of appetite is not to be considered of value specifically, there are features in the generalized larva which point to this form being the stem of the various yellow species, certainly its taste for a Cryptogam might have been brought down from those remote ages of the past, that are clothed in the Cenozoic haze we would so gladly pierce. Finding ourselves, then, in contact with this representative form, whose history and anatomy must have an important bearing in a study of the phylogeny of the genus, we ask to be allowed to introduce still another aristocrat.

*Papaipema pterisii*, n. sp.—Form and habits typical; ground colour yellow. Primaries show the usual markings and contrasts. T. p. line bends but little, its geminate form hardly discernible, the outside one a purple fascia, though in many specimens it might not be regarded as such. Reniform broken, partly concolorous, only the two inner sections white-marked. The orbicular and claviform offer the best superficial character, the latter is not divided; orbicular irregularly quadrate, and its attachment to the upper part of claviform produces a conspicuous, brightly-white blotch or bar, longer than the reniform. Secondaries lighter, clouded at the margin. The discal spot is not noticed from above. The male structures are fitly representative of the typical form. They differ from *verona*, though not perceptibly from *Harrisii* or *purpurifascia*. Expanse, 31-32 mm.; 1.25 in. Three specimens furnished the description. A co-type will be placed in the National Museum.