

II. SPECIES INVESTIGATED

a) Identity. Like many other plants of wide geographical range this fungus exhibits considerable variation in its morphological characters, and at times its identity with the north European *Lomes applanatus* has been questioned. Thus, Merrill (30) considers it an entirely distinct species—a position based on the creation of the species *meialoma* in 1846 by Fèveille (23) on material sent him from north-eastern America. It is of interest to note in this connection that Fèveille found specimens in the same consignment which he regarded as being identical with the European *E. applanatus*; that is, in one lot of American plants sent to him he regarded some as being identical with the European *E. applanatus* and others as belonging to a new species, restricted to America, and named by him *Polyporus meialoma*. The differences noted by Fèveille had to do with the colour of the cup and the pores and the width of the sterile border underneath. However, American mycologists (including Merrill) today consider that Fèveille was wrong in so far as he recognized two species from America, and hold that all of our plants belong to the same species whatever we may call it. A study by Atkinson (2) in 1908 would appear to establish its identity with the European form, thus reducing *P. meialoma* to a synonym—a view contrary to that held by Merrill, already stated, who regards our form as different from the European and restricted to America. The writer has examined hundreds of fruiting bodies in this region, and finds that the characters of the fruiting body are fully as variable as stated by Atkinson. In particular there is much variation in the width of the sterile band, as illustrated in Fig. 1; moreover, on the same pileus the band is wider early in the growing season than later; it is generally wider in one-year-old piles than in older ones; occasionally one finds narrow and wide banded piles growing mixed on the same log, though this is not the rule. Further, an examination of the Swedish European material in the herbarium of the University of Toronto has brought out no criterion for separating it from the New World form. Neuman (33) in a very recent study, also considers our species identical with the European. A careful weighing of the evidence seems to show that there is little doubt of the identity of the European and the American form, at least as yet a constant feature has been described that would distinguish between the two, and I quite agree with Atkinson in relegating *P. meialoma* to the rank of synonymy and in calling our plants *Lomes applanatus*.

b) Hosts. Various partial lists of hosts are on record by different writers. Farlow and Seymour (14) in their Host Index recorded 4 or