

The identity of *Elaphomyces granulatus*

Article in Transactions of the British Mycological Society 50(1):129-136 · March 1967 with 8 Reads

DOI: 10.1016/S0007-1536(67)80069-X

1st Lilian E. Hawker

2nd Joan Fraymouth

3rd Margarita de la Torre

Abstract

The distinction between *Elaphomyces granulatus* Fr. and *E. asperulus* Vittad. has been variously interpreted by recent investigators. A consideration of the relevant literature shows that Vittadini (1831, 1842) gave no clear description of spore ornamentation but stated that fruit bodies of *E. asperulus* were darker in colour than those of *E. granulatus* and that the peridium of the latter was uniformly light coloured in section, that of *E. asperulus* being reddish. Examination of a large number of collections from different sources showed that spore ornamentation is variable even within the same fruit body. Younger spores tend to be spiny, relatively small and light coloured, older ones irregularly warty, large and dark. The outer layer of the walls of young spores in freshly collected material consists of radiating rod-like elements embedded in a matrix. As the spore enlarges these separate (the spore then appearing spiny) and in the final stages of spore maturation the matrix dies and shrinks causing the 'spines' to coalesce and partially collapse (the spore then appearing as if covered with irregular warts). Experiments on the effects of rate of drying of fruit bodies revealed that the proportion of spiny spores decreases with drying. It is concluded that *E. asperulus* cannot be distinguished from *E. granulatus* on the basis of spore ornamentation alone, and is best treated as a variety of the latter.