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The identity and proper scientific name for the sucking louse of North American domesticated pigs. HENRY E. EWING.

No less than nine distinct scientific names have been applied to lice of domesticated pigs or to those of wild pigs of the genus *Sus*, which genus includes the wild ancestor (or ancestors) of our domesticated pigs. The chief reason for there being so many names is that the lice from these different species of pigs, or from the same species in different parts of the world, differ in easily measurable taxonomic characters.

It has been shown recently that the outstanding differences between these hog lice are to be found between the lice of European wild boars, and the lice of both domestic and wild pigs of eastern Asia. Those forms of *Haematopinus* from European wild boars are more slender, have a much more slender head and a differently shaped one. The sternum of the European forms is about as long as wide, while the sternum of the Asiatic lice is only about $\frac{1}{2}$ as long as wide. Also the paratergal plates, or lateral tergites, are only about half as long in the lice from European wild hosts as in lice from Asiatic hosts.

But what specific names shall we apply to these two species and what varietal name shall be applied to the louse of North American domestic pigs? For the European hog louse, 4 names come into consideration, but only 2 need be mentioned here. *H. suis* (Linnaeus) was described from *Sus scrofa*, under which name Linnaeus included both the wild boar of Europe and the domesticated pig. The first one really to revise the lice of *Sus* species was Fahrenholz, who limited *H. suis suis* to the wild boar of Europe, which is now known as *Sus scrofa*. Some doubt, however, exists as to the validity of such a limitation by Fahrenholz since Linnaeus indicated in a cross reference that his louse came from domesticated pigs.

If we can not accept the wild boar as the host of *H. suis suis*, it will lead to much confusion, since there are today in Europe at least 2 species of *Haematopinus* on domesticated pigs and 2 varieties of one of these species, hence there is no way of knowing what form Linnaeus had in Sweden almost 2 centuries ago. The probabilities are, however, that the *H. suis* of Linnaeus was similar to types found today on certain domesticated pigs in central Europe, which are in fact very similar to the louse on the wild boars, and which must be referred to the same species though probably not to the same variety. Hence there is no justification for using Linnaeus' name for the Asiatic hog louse.

The name *Haematopinus irritans* was proposed by Law in 1903 for *H. suis* for no evident reason. It is invalid under the law of priority.

If *Haematopinus suis* (Linnaeus) is left out of consideration in connection with the proper specific name for the Asiatic hog louse, which appears as the only constructive course to take, the following names are to be considered in its connection:

H. penicillatus Piaget (1885).—This louse, taken from a zebu in a zoological garden, can not be considered as a form of *suis* as has been suggested, since Piaget's drawing and description indicate clearly that he was dealing with a variety of *tuberculatus*, members of which occur on hosts of the family Bovidae.

H. suis adventicius Neumann (1911).—The type host of this species was designated by Fahrenholz as *Sus vittatus*. This is the wild hog of Sumatra. The louse has the specific characters—short, broad sternal plate and large paratergal plates—of the lice found on many domesticated Asiatic pigs. Although differing variably from other forms taken from Asiatic and certain domesticated pigs, its name is the oldest available one for the Asiatic complex, hence the specific name for the Asiatic hog louse should be *Haematopinus adventicius* Neumann. Of this species there are 3 varieties.

H. suis chinensis Fahrenholz (1916).—This form should be regarded as *H. adventicius chinensis* Fahrenholz.

H. suis germanicus Fahrenholz (1916), should be regarded as *H. adventicius germanicus* Fahrenholz.

The first valid name, therefore, to be applied to lice of the Asiatic type occurring on domesticated pigs is *H. adventicius chinensis* Fahrenholz.

I have examined 10 lots of *Haematopinus* taken in North America, all probably coming from domestic pigs except 1 lot which came from a peccary. They are of the Asiatic type. It appears, therefore, that the common sucking louse of domesticated North American pigs is the Asiatic form, and is nearest to the variety *chinensis* Fahrenholz. Hence the proper name of the common sucking louse of North American domesticated pigs becomes *Haematopinus adventicius chinensis* Fahrenholz.

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