

Ernest Duchesne - too young to be right?



All over the world, Alexander Fleming is mostly honoured for the accidental discovery of penicillin. But there was someone before him who recognised the antimicrobial effectiveness of moulds: Ernest Duchesne (b. 30.5.1874 in Paris, d. 12.4.1912 in Amélie-les-Bains-Palalda). This imbalance of recognition has also found its way into philately. While on collect.com, for example, about 140 philatelic covers in the form of stamps are associated with Alexander Fleming, there is only one stamp from Monaco for Ernest Duchesne from 1974 for his 100th birthday. In addition, there is the

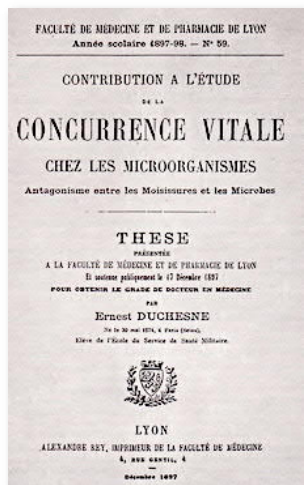
personalised French postal stationery from 1979 shown here.

Ernest Duchesne was a French military doctor. His idea that mould could have an antimicrobial effect came from his observation that in the military hospital the saddles for horses were kept dark and damp so that mould could grow on the saddle. The stable boys swore that this made the sores caused by the rubbing of the saddles heal faster. After verifying this claim to be true on diseased guinea pigs, which he injected with a solution of these moulds, he conducted a whole series of experiments on the exchange effect between bacteria (*E. coli*) and



moulds (*Penicillium glaucum*). He proved that the mould was indeed able to eliminate the bacteria. Even against typhoid fever, this mould was effective (in contrast to the *P. notatum* found by A. Fleming). But *P. glaucum* was otherwise a very weak bacterial antagonist, which was due to the antibiotic it produced, patulin, which - in contrast to penicillin - was only effective in very high and sometimes toxic doses.

Irony of fate: His doctoral thesis on the antagonism of moulds and microbes, which he submitted as early as 1897 to obtain his doctorate, was rejected by the Pasteur Institute. The reason given was that he was too young - 23 years old - and too unknown. His subsequent military service and his tuberculosis disease, which was fatal for him, prevented him from doing further research.



Literatur: <https://incubator.rockefeller.edu/geek-of-the-week-ernest-duchesne/>