1067-37-1121Elif Demirci* (edemirci@science.ankara.edu.tr), Ankara University Faculty of Sciences,
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(nozalp@science.ankara.edu.tr). On a Fractional Order Epidemic Model.

Fractional order calculus is an old branch of thoeretical mathematics. Nevertheless, it has recently being used in describing real systems. We introduce an epidemic model of fractional order within a population that grows logistically. We give some stability results for the fixed points of the system. We also give a numerical example using a real data set for HBV and determine the order of the system for this data set. (Received September 19, 2010)