John R. Graef* (john-graef@utc.edu), Department of Mathematics, University of Tennessee at Chattanooga, 615 McCallie Ave., Chattanooga, TN 37403, and Said R. Grace. Asymptotic behavior of solutions of a forced third order integro-differential equation with δ-Laplacian.

The asymptotic behavior of solutions of a certain forced third order integro-differential equation with a δ -Laplacian is studied. The goal is to investigate whether nonoscillatory solutions behave at infinity like certain nontrivial nonlinear functions. The proofs involve applications of Young's, Hölder's, and Gronwall's inequalities. (Received September 18, 2018)