1-Soliton solution of the generalized KdV equation with generalized evolution

M.S. Ismail [a], Anjan Biswas [b,*]

[a] Department of Mathematics, College of Science, P.O. Box 80203, King Abdulaziz University, Jeddah-21589, Saudi Arabia
[b] Center for Research and Education in Optical Sciences and Applications, Applied Mathematics Research Center, Department of Mathematical Sciences, Delaware State University, Dover, DE 19901-2277, USA

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ABSTRACT

This paper obtains the 1-soliton solution of three variants of the generalized KdV equation with generalized evolution. The solitary wave ansatz is used to carry out the integration of such equation. The parameter domain is also identified in the process. A couple of conserved quantities are also calculated for each of these variants. The numerical simulations are also carried out.

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