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**The extended tanh method for new compact and noncompact solutions for the KP-BBM and the ZK-BBM equations.** (English) [Zbl 1154.35443](#)  
Chaos Solitons Fractals 38, No. 5, 1505-1516 (2008).

Summary: This paper is devoted to studying the KP-BBM and the ZK-BBM equations. The extended tanh method is used to conduct the analysis. The KP-BBM and the ZK-BBM equations give rise to compacton solutions: solitons with the absence of infinite tails, solitons: nonlinear localized waves of infinite support, solitary patterns solutions having infinite slopes or cusps, and plane periodic solutions. The work confirms the power of the proposed method.

MSC:

35Q53 KdV equations (Korteweg-de Vries equations)  
35B10 Periodic solutions to PDEs  
35Q51 Soliton equations

Cited in 35 Documents

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