

## BOUNDEDNESS OF SOLUTIONS OF CERTAIN THIRD ORDER DIFFERENTIAL EQUATION

B. MEHRI AND D. SHADMAN

*Abstract.* We study the behavior of the solutions of the differential equation  $x''' + a(t)f(x'') + b(t)g(x') + c(t)h(x) = e(t)$ . We shall present sufficient conditions on the functions involved under which the solutions of the above differential equation are bounded. Some results on the regularity and asymptotic behavior of the solutions are also obtained.

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