

Riccati technique for delayed half-linear differential equation

Robert Mařík

Department of Mathematics, Mendel University, Brno, Czech Republic

marik@mendelu.cz

In the paper we use the Riccati equation to study the delayed and neutral versions of half-linear differential equation. Under convenient conditions imposed on the coefficients of the equations we improve a priori bounds typically used in the literature and thus suggest sharper versions of the related oscillation criteria.