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**Some new Gronwall-Bellman-type inequalities on time scales and their applications.** (English) [Zbl 1397.26018](#)

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**Summary:** We establish some new Gronwall-Bellman-type inequalities on time scales. These inequalities are of new forms compared with other Gronwall-Bellman-type inequalities established so far in the literature. Based on them, new bounds for unknown functions are derived. For illustrating the validity of the inequalities established, we present some applications for them, in which the boundedness for solutions for some certain dynamic equations on time scales is researched.

**MSC:**

**26E70** Real analysis on time scales or measure chains

**26D15** Inequalities for sums, series and integrals

**26D10** Inequalities involving derivatives and differential and integral operators

**Full Text:** [DOI](#)