1056-39-746 **Abdulkadir Dogan** and **John R Graef*** (John-Graef@utc.edu), Department of Mathematics, The University of Tennessee at Chattanooga, Chattanooga, TN 37403, and **Lingju Kong**. *Higher order singular multi-point boundary value problems on time scales.*

We study the singular boundary value problem

$$\left(\phi\left(u^{\Delta^{n-1}}\right)\right)^{\nabla} + \lambda a(t)f(u) = 0, \ t \in (0,T)_{\mathbb{T}},$$

$$\begin{cases} u^{\Delta^i}(0) = \sum_{j=1}^{m} \alpha_j u^{\Delta^i}(\xi_j), \ i = 0, \ldots, n-2, \\ \phi\left(u^{\Delta^{n-1}}(T)\right) = \sum_{j=1}^{m} \beta_j \phi\left(u^{\Delta^{n-1}}(\xi_j)\right), \end{cases}$$

on a time scale $\mathbb{T}$. Conditions for the existence and uniqueness of positive solutions are obtained. The dependence of positive solutions on the parameter λ is studied. We also present similar results for a problem with the same differential equation and different boundary conditions. The results are illustrated with examples. Our analysis mainly relies on the mixed monotone operator theory. (Received September 16, 2009)