1097-05-414 **Shaohui Wang*** (swang4@go.olemiss.edu), 12 County Road 1106, Oxford, MS 38655, and **Bing Wei** (bwei@olemiss.edu), Department of Mathematics, University of Mississippi, University, MS 38677. *Multiplicative Zagreb indices of k-trees.*

Let G be a graph with vetex set $V(G)$ and edge set $E(G)$. The first generalized multiplicative Zagreb index of G is $\prod_{1,c}(G) = \prod_{v\in V(G)} d(v)^c$, for a real number $c > 0$, and the second multiplicative Zagreb index is $\prod_2(G) = \prod_{uv\in E(G)} d(u)d(v)$, where $d(u), d(v)$ are the degrees of the vertices of u, v. The multiplicative Zagreb indices have been the focus of considerable research in computational chemistry dating back to Narumi and Katayama in 1980s. In this paper, we generalize Narumi-Katayama index and the first multicative index, where $c = 1, 2$, respectively, and extend the results of Gutman to the generilized tree, the k-tree, where the results of Gutman are for $k = 1$. Additionally, we characterize the extremal graphs and determine the exact bounds of these indices of k-trees, which attain the lower and upper bounds. (Received January 27, 2014)