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Shapiro (lou.shapiro@gmail.com), Department of Mathematics, Howard University, WA DC 20059. Combination of ordered trees associated with nonnegative integer sequences.

For a sequence  $A = (a_k)_{k\geq 0}$ ,  $a_0 = 1$  of nonnegative integers, A-ordered tree is an edge-colored ordered tree satisfying the following conditions:

- (i) the set of possible outdegrees of nonroot vertices is  $\{k | a_k \neq 0\}$ ;
- (ii) the rightmost edge from a nonroot vertex of degree k is colored by  $a_k$  colors.

In this talk, we consider an enumeration problem for A-ordered trees. In particular, the generating functions for vertices and leaves of those trees are given respectively. Further, we discuss a combination of A- and B-ordered trees, and explore how the combination of two ordered trees can be translated in the real world. (Received September 21, 2011)