1023-05-1618Aaron D. Jaggard* (adj@math.tulane.edu), Department of Mathematics, Tulane University,
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University. Generating tree isomorphisms for pattern-avoiding involutions.

We show that for $k \ge 5$ and the permutations $\tau_k = (k-1)k(k-2)\dots 312$ and $J_k = k(k-1)\dots 21$, the generating tree for involutions avoiding the pattern τ_k is isomorphic to the generating tree for involutions avoiding the pattern J_k . This implies a family of Wilf equivalences for pattern avoidance by involutions; at least the first member of this family cannot follow from any type of prefix-exchange result. Using a different approach, we also prove a broader family of Wilf equivalences for pattern avoidance by involutions. (Received September 26, 2006)