1009-05-10   **Steven J Tedford*** (`steven.tedford@fandm.edu`), Department of Mathematics, Franklin and Marshall College, P.O. Box 3003, Lancaster, PA 17604-3003. *A characteristic polynomial for rooted mixed graphs.*

An arborescence in a rooted mixed graph Ω_r is a tree in which every directed edge is directed away from the root. The collection of arborescences in a rooted mixed graph form the feasible sets of a greedoid. We consider the characteristic polynomial of this greedoid and show the graphical information included in this polynomial. We will use this information to find the characteristic polynomial for various classes of rooted graphs. (Received April 04, 2005)