

1145-VP-2921 **Billy M Duckworth*** (billy@iduck.org). *The Randić Index and Average Path Length.*

In graph theory the Randić Index is a number that gives information about the degree of branching within a particular graph. We examined the relationship between the Randić Index and other well known graph properties such as radius, diameter, and average path length. We attempt to bound the Randić Index for families of graphs such as paths, cycles and "methylated" paths and cycles. (Received September 25, 2018)