

1116-T1-2638      **Shabeena Ahmed\*** (shabeena\_ahmd@yahoo.com), Santa Clara, CA. *Lineage – Viewed Through a C-set.*

There have been many recent developments in the treelike structures. One important field of recent study has been in the area of evolutionary biology. A pedigree is a directed acyclic graph that represents ancestral relationships between individuals in a population. The relation between species has been studied extensively in phylogenetics and has opened new areas of research.

An area of study that still needs to be explored is the study of interplay between pedigrees and phylogenetics with C-sets and D-sets, which occurs in the study of primitive Jordan Groups. So the question is the following.

**Problem:** Can we trace lineage in terms of a C-set? If yes, can there be some sort of classification?

Construction of a C-set with restrictions is presented and shown that the first part of the question is yes. The connection between pedigrees and phylogenetics with C-sets and D-sets is studied. Finally the different fields that can collaborate on this study are illustrated. In conclusion, this study is an attempt to portray the importance of this area of research in opening new interdisciplinary studies.

**Key words:** C-set, Pedigree, Phylogenetics (Received September 22, 2015)