



Phylogenetic networks

Summer 2013

Assignment 1

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1. Minimum spanning network (3 points)

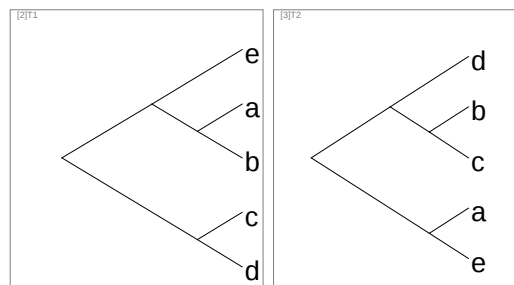
One approach to computing a “haplotype network” is to use a minimum spanning network. Please give a definition of this concept and briefly describe an algorithm for computing one.

2. Application of minimum spanning network (4 points)

Do a literature search to find an article that uses a minimum spanning network to elucidate the evolutionary relationships between individuals of one or more species. Give a brief summary of the problem addressed, show the network reported and explain briefly what inferences the authors from the network.

3. Clusters and network (3 points)

Consider the two following trees:



List all clusters present in T_1 and all the clusters present in T_2 .

Determine the cluster network that contains all (and only) the clusters obtained from T_1 and T_2 .