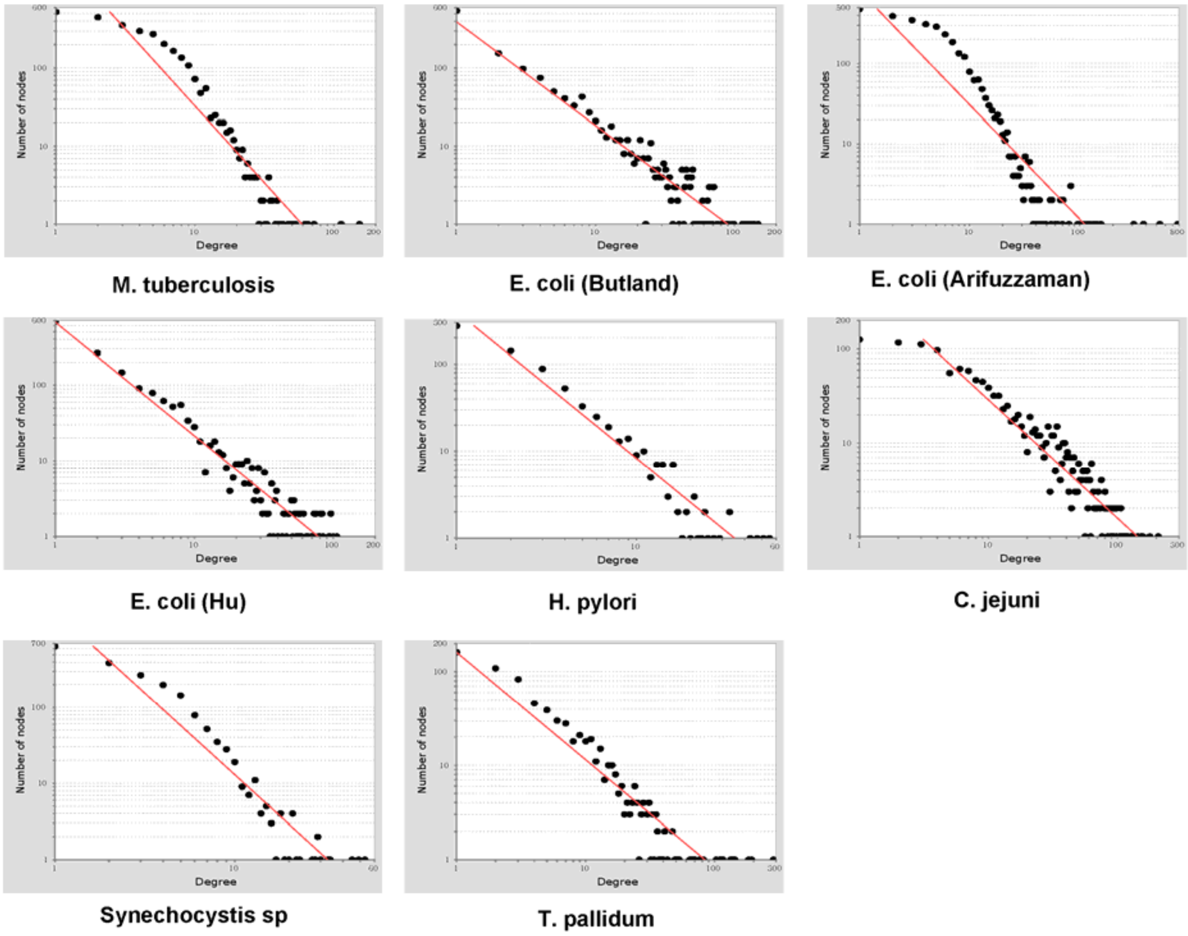
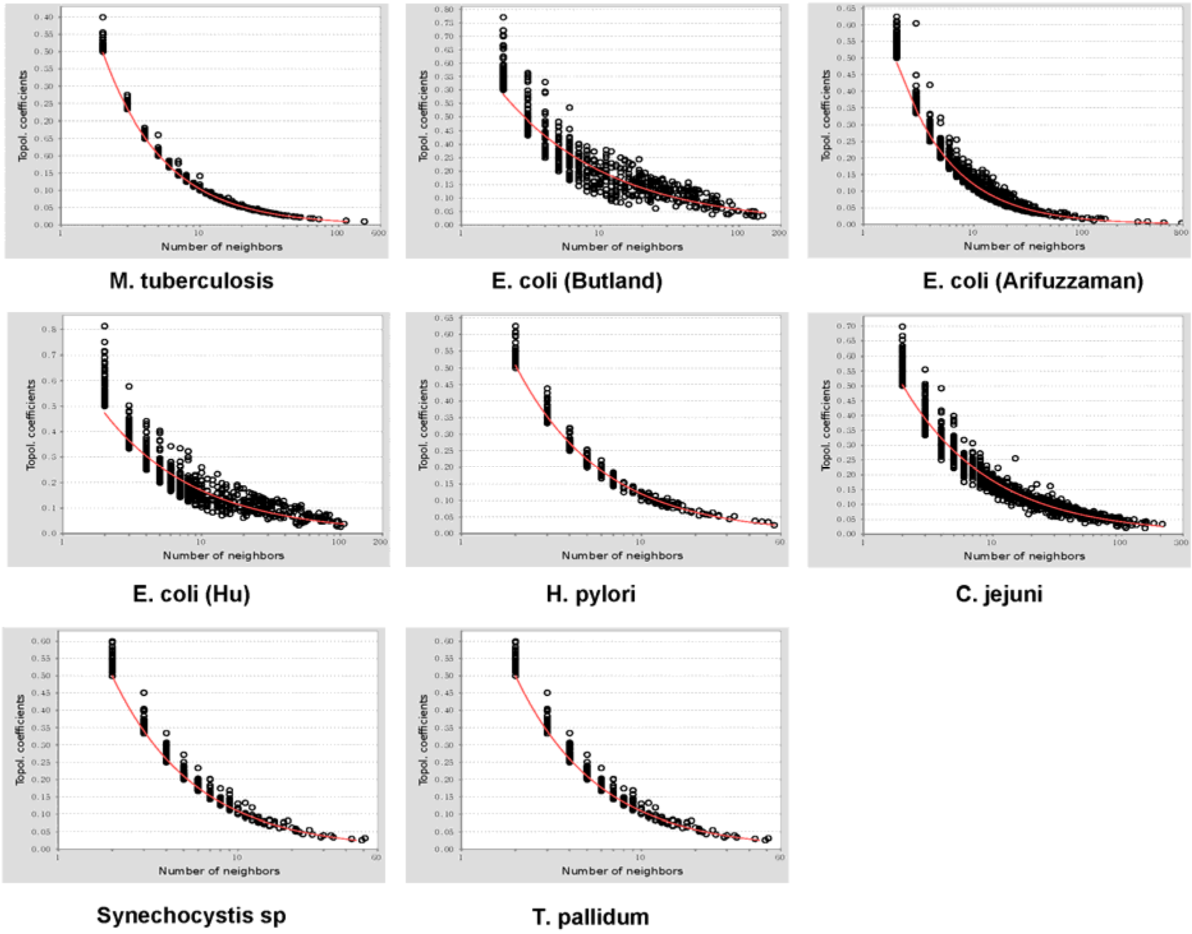
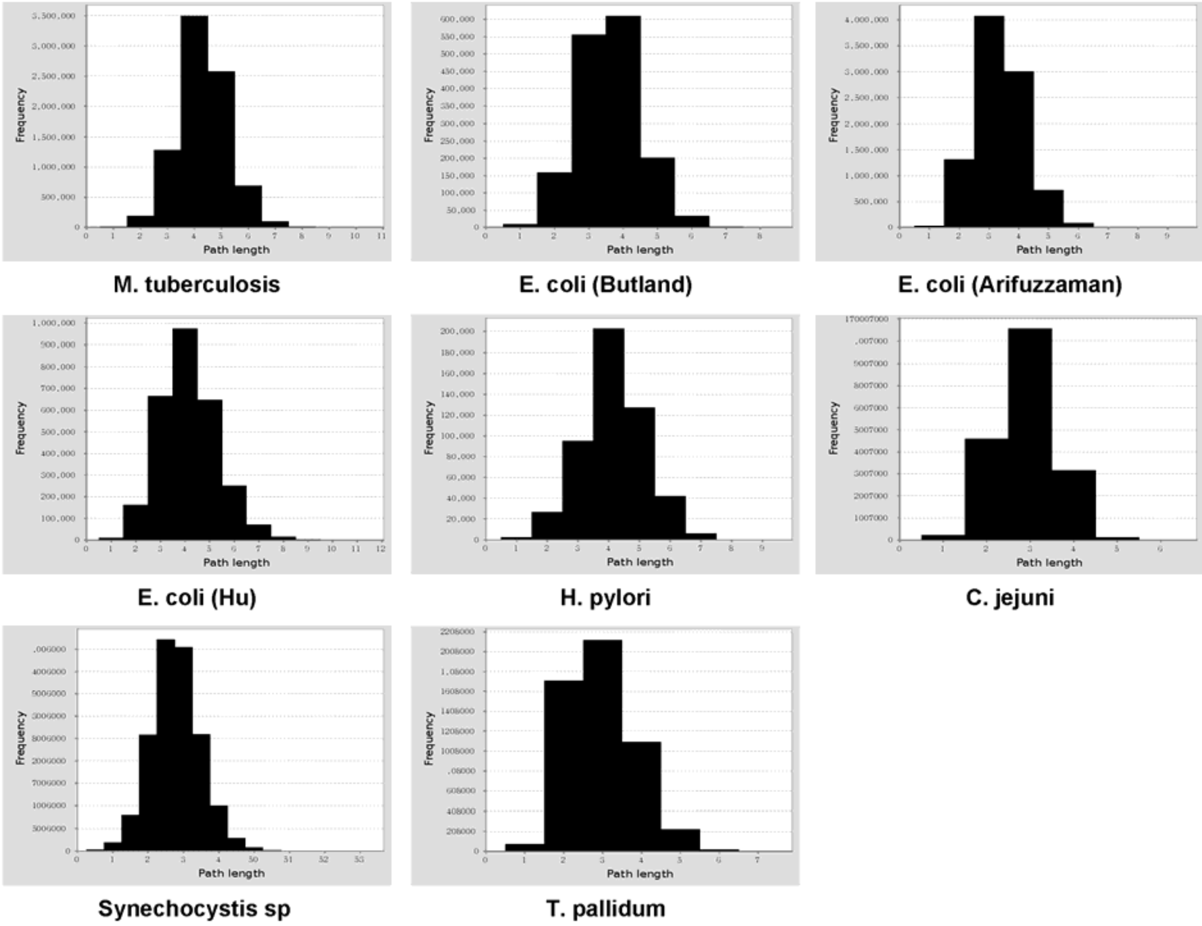
Fig. S3 Topological analysis of the *M. tuberculosis* PPI Network



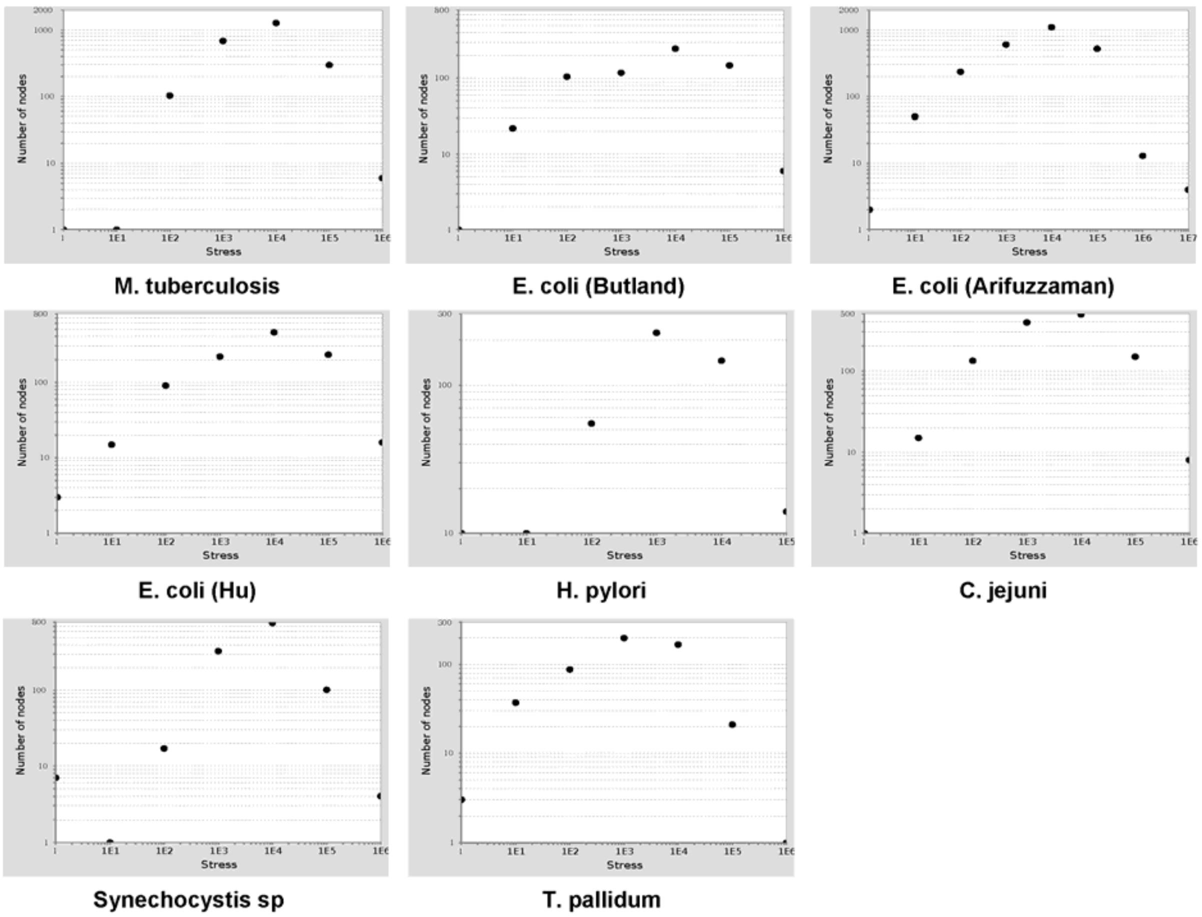
(A) Degree distribution of *M. tuberculosis* B2H and reference protein interaction networks. The node degree of a node *n* is the number of edges linked to *n*. The node degree distribution gives the number of nodes with degree *k*. Power law distribution of node degree indicate the scale-free property of networks.



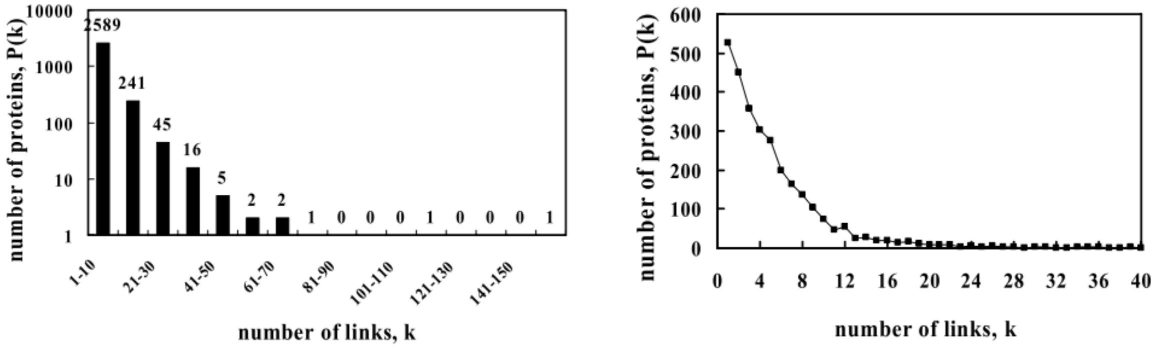
(B) Topological coefficient distribution of *M. tuberculosis* B2H and reference protein interaction networks. The topological coefficient T_n of a node n with k_n neighbors is computed as follows: $T_n = avg\ (\ J(n,m)\ )\ /\ k_n$. Here, $J(n,m)$ is defined for all nodes m that share at least one neighbor with n. The value $J(n,m)$ is the number of neighbors shared between the nodes n and m, plus one if there is a direct link between n and m (Stelzl *et al*, 2005).



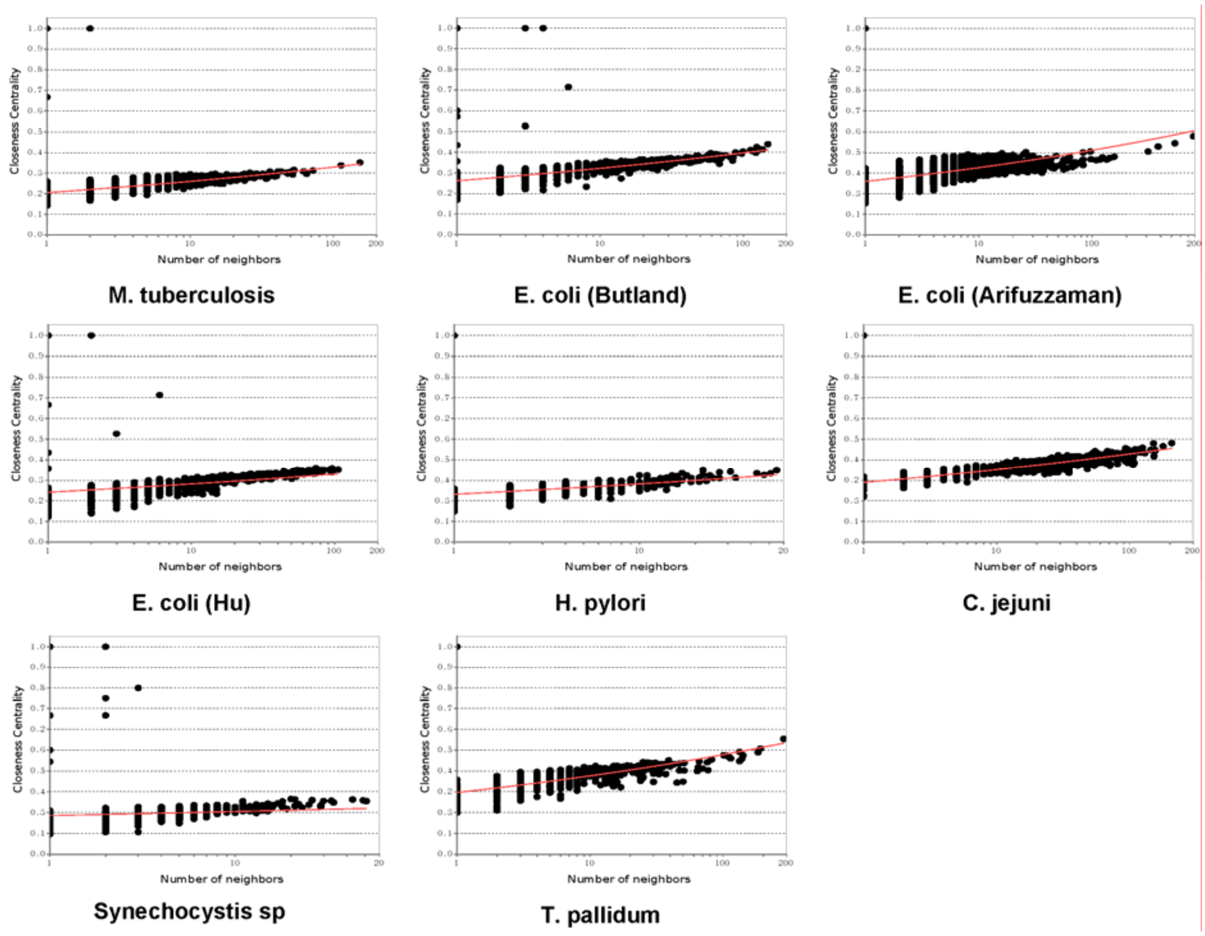
(C) Shortest path length distribution of *M. tuberculosis* B2H and reference protein interaction networks. The shortest path length distribution gives the number of node pairs (n,m) with $L(n,m) = k$.



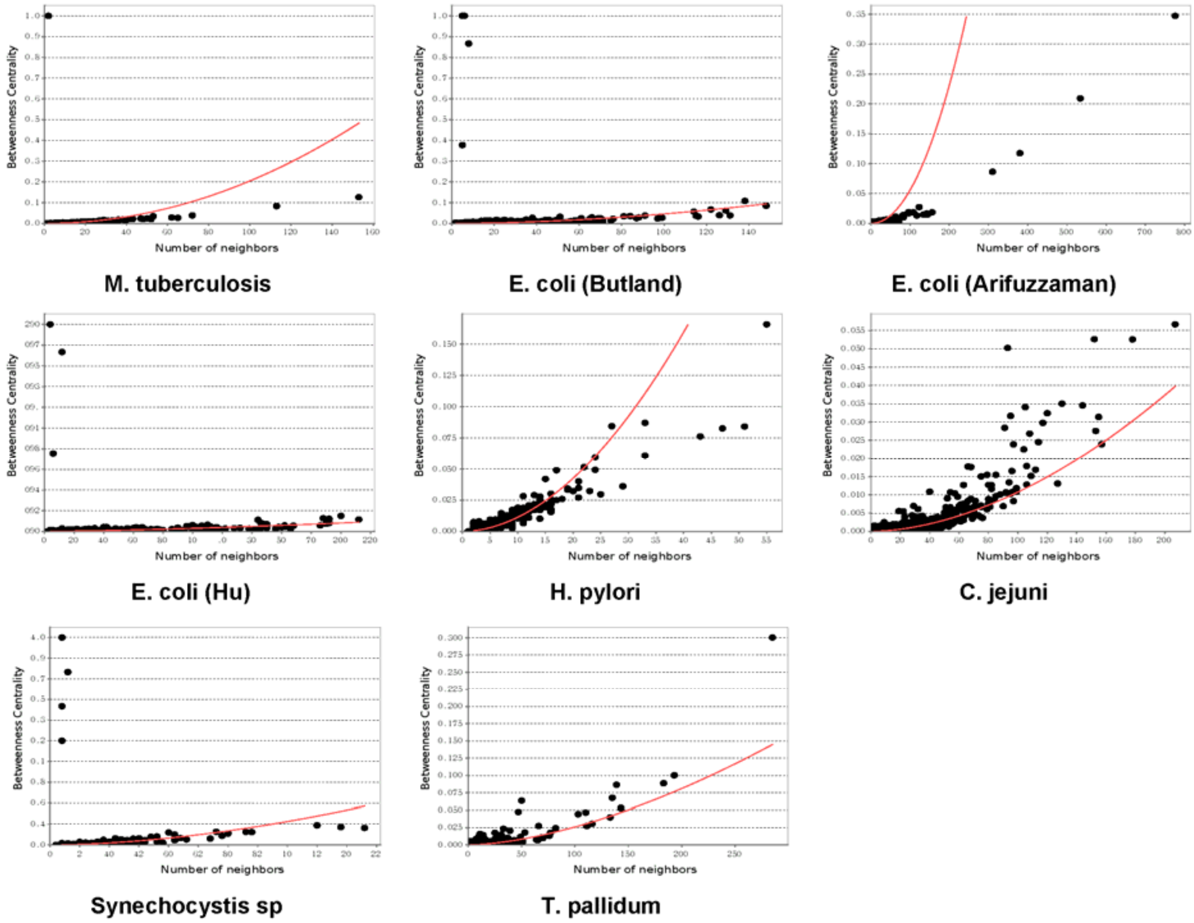
(D) Stress distribution of *M. tuberculosis* B2H and reference protein interaction networks. The stress of a node n is the number of shortest paths passing through n. The stress distribution gives the number of nodes with stress s for different values of s. The values for the stress are grouped into bins whose size grows exponentially by a factor of 10. The bins used for this distribution are {0}; [1, 10); [10, 100); ...



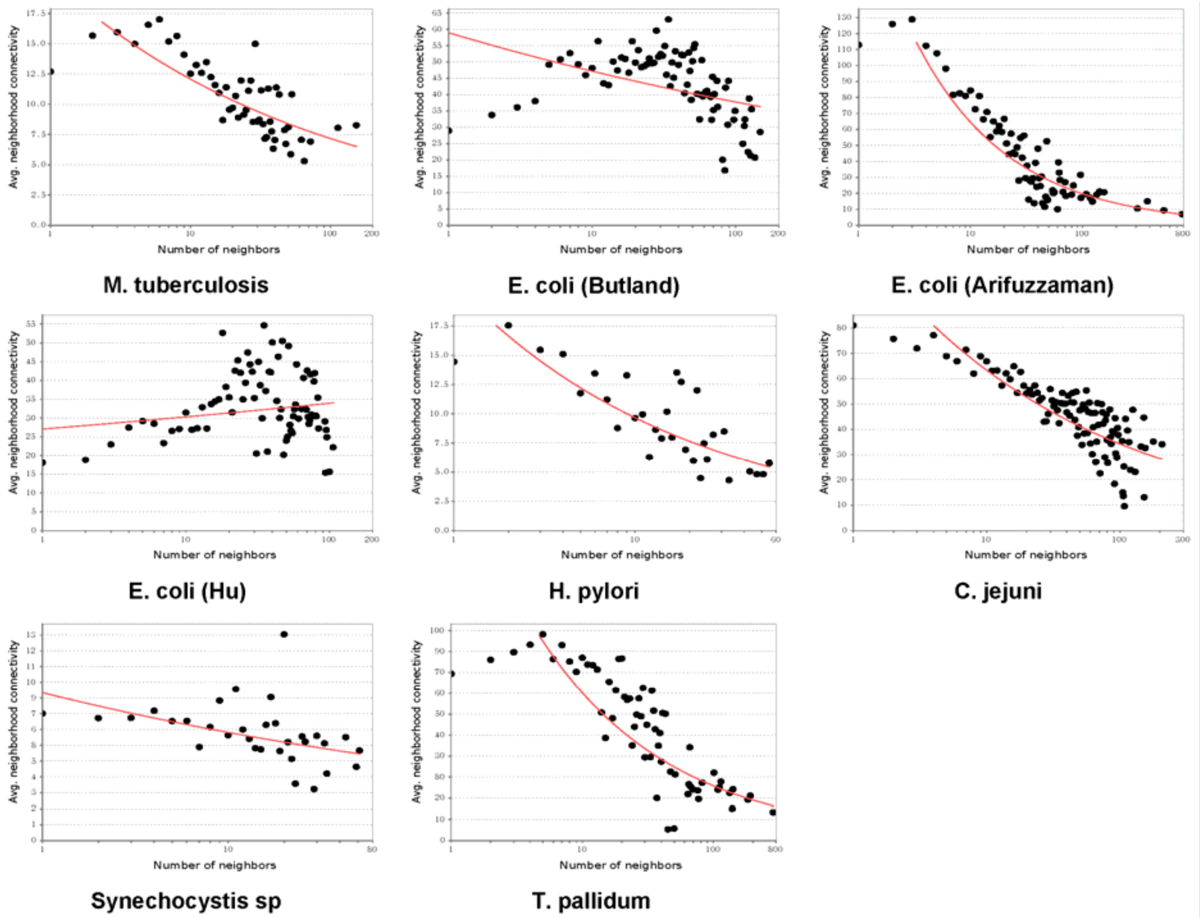
(E) The degree distribution of B2H networks in interval (left panel). The degree distribution of B2H networks with links *k* from 1 to 40 (right panel).



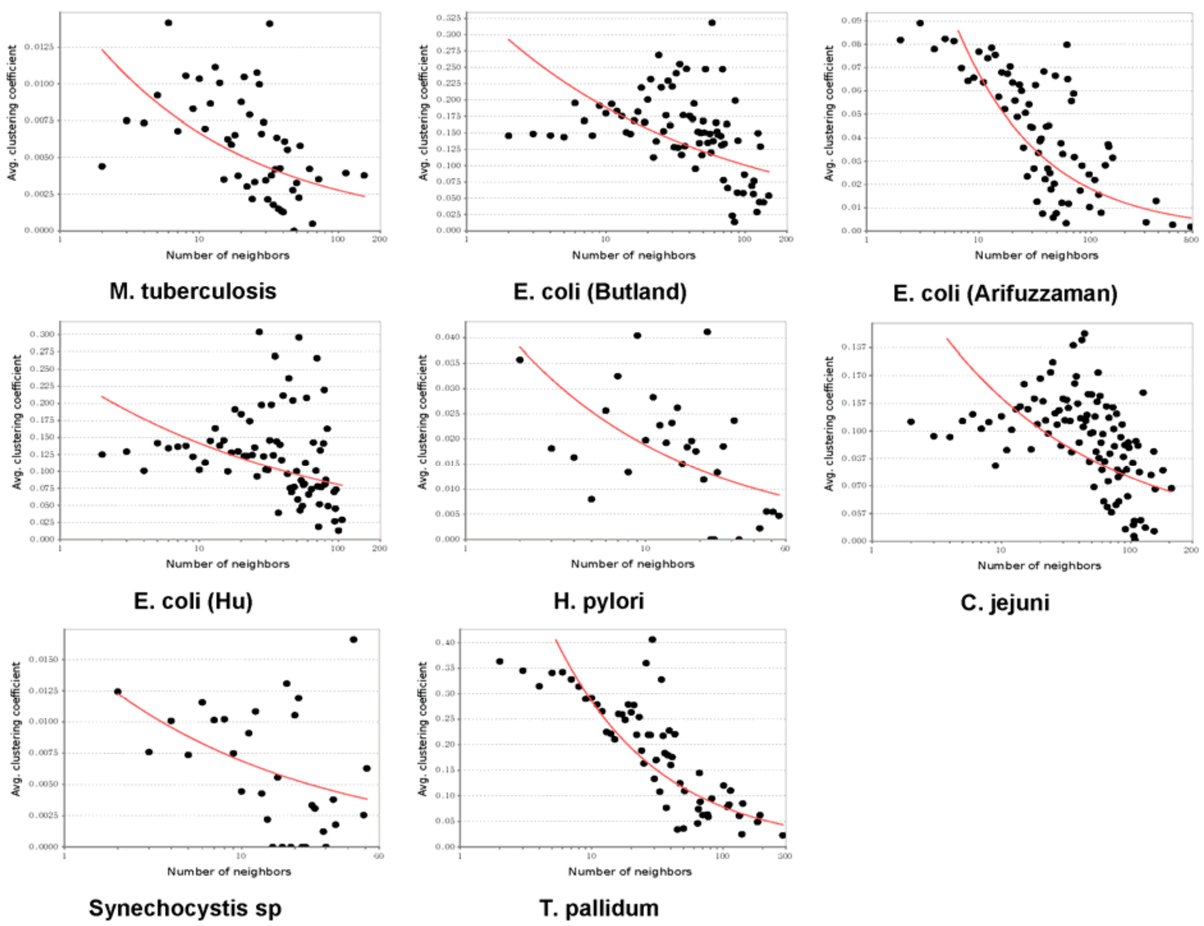
(F) Closeness centrality distribution of *M. tuberculosis* B2H and reference protein interaction networks. The closeness centrality was plotted against the number of neighbors. The closeness centrality *Cc(n)* of a node *n* is defined as the reciprocal of the average shortest path length and is computed as follows: $Cc(n) = 1 / avg(L(n,m))$, where $L(n,m)$ is the length of the shortest path between two nodes *n* and *m*. Closeness centrality is a measure of how fast information spreads from a given node to other reachable nodes in the network.



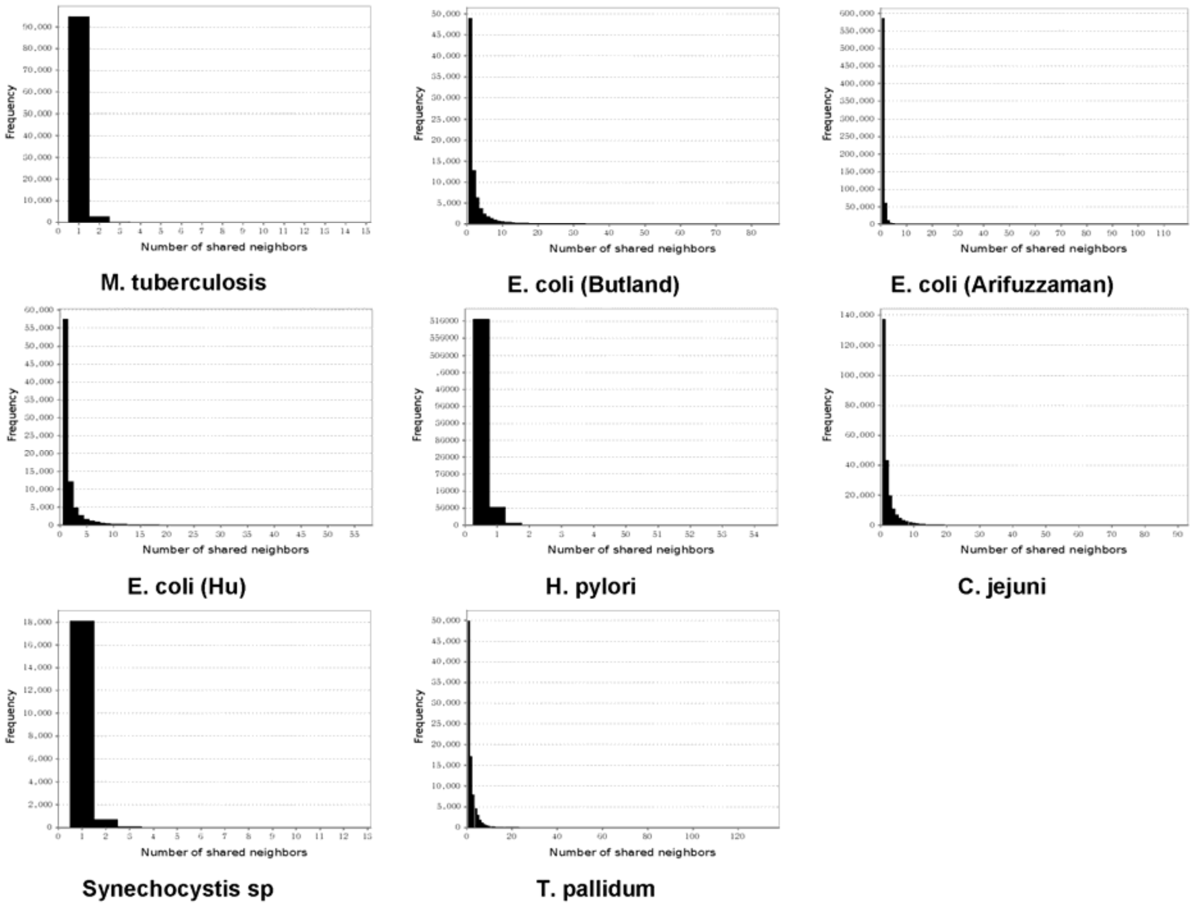
(G) The betweenness centrality distribution of *M. tuberculosis* B2H and reference interaction networks.



(H) The neighborhood connectivity distribution of *M. tuberculosis* B2H and reference interaction network. The connectivity of a node is the number of its neighbors. The neighborhood connectivity of a node *n* is defined as the average connectivity of all neighbors of *n* (Maslov *et al*, 2002). The neighborhood connectivity distribution gives the average of the neighborhood connectivities of all nodes *n* with *k* neighbors for *k*.



(I) The average clustering coefficient distribution of *M. tuberculosis* B2H and reference interaction networks. The clustering coefficient C_n of a node n is defined as $C_n = 2e_n/(k_n(k_n\text{-}1))$, where k_n is the number of neighbors of n and e_n is the number of connected pairs between all neighbors of n (Barabási *et al*, 2004; Watts *et al*, 1998).



(J) The distribution of shared neighbors for *M. tuberculosis* B2H and reference interaction networks. Shared neighbors $P(n,m)$ is the number of partners shared between the nodes n and m, that is, nodes that are neighbors of both n and m. The shared neighbors distribution gives the number of node pairs (n,m) with $P(n,m) = k$.