Node weight distribution and disparity of some bipartite networks[1] XIU-LIAN XU, CHUN-HUA FU, DA-REN HE, College of Physics Science and Technology, Yangzhou University — We present an empirical investigation of 14 real world networks, which can be described by bipartite graphs. Each node is assigned a node weight, which denotes the obtained competition result. Firstly, empirically we observed that the total node weight distributions of all the systems may be fitted by shifted power law function form. The key parameters of the function can be used to describe the disparity. Secondly, a node weight disparity is defined for the same purpose. The empirical relationships between the parameters are obtained. The results show that the node weight distribution is very uneven.

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