



Figure S1. Two-dimensional principal component analysis (PCA) score plot to depict the variation among the metabolic profile of *R. toruloides* under different glucose and nitrogen percentage. C: control [3 % glucose, 0.5 % (NH₄)₂SO₄], 1: N-limited [5 % glucose, 0.12 % (NH₄)₂SO₄], 2: N sufficient [5 % glucose, 0.5 % (NH₄)₂SO₄]