On a new class of unified reduction formulas for Srivastava's general triple hypergeometric function F{(3)}[x, y, z]

ABSTRACT

Very recently, by applying the so called Beta integral method to thewell-known hypergeometric identities due to Bailey and Ramanujan, Choi et al. [Re-duction formula for Srivastava's triple hypergeometric seriesF(3)[x, y, z], KyungpookMath. J.55(2015), 439–447] have obtained three interesting reduction formulas forthe Srivastava's triple hypergeometric series F(3)[x, y, z].The aim of this paper is to provide three unified reduction formulas for the Sri-vastava's triple hypergeometric seriesF(3)[x, y, z]from which as many as reductionformulas desired (including those obtained by Choi et al.) can be deduced.In the end, three unified relationships between Srivastava's triple hypergeometricseries and Kampé de Fériet function have also been given.