Abstract

Let $A = (a_{j,k})_{j,k \geq 1}$ be a non-negative matrix. In this paper, we characterize those $A$ for which $\|A\|_{E,F}$ are determined by their actions on decreasing sequences, where $E$ and $F$ are suitable normed Riesz spaces of sequences. In particular, our results can apply to the following spaces: $\ell_p$, $d(w,p)$, and $\ell_p(w)$. The results established here generalize the corresponding ones given by Bennett in Quart. J. Math. Oxford (2), 49(1998), 395-432, by Chen et al in J. Math. Anal. Appl. 273(2002), 160-171, by Jameson in Illinois J. Math. 43(1999), 79-99, and by Jameson-Lashkaripour in J. Ineq. Pure Appl. Math. 3(1), (2002), 1-17.