COMMENTS ON THE PAPER BY GORDJI AND BAGHANI
ENTITLED "A GENERALIZATION OF NADLER'S FIXED POINT THEOREM"

B. E. RHOADES *

Abstract. We point out that the theorem of the paper listed in the title is a known result.

1. Main result

In [1] the following theorem was proved.

Theorem 1.1. Let \((X, d)\) be a complete metric space, \(T : X \to CB(X)\) such that
\[
H(Tx, Ty) \leq \alpha d(x, y) + \beta [D(x, Tx) + D(y, Ty)] + \gamma [D(x, Ty) + D(y, Tx)]
\]
for all \(x, y \in X\) where \(\alpha, \beta, \gamma \geq 0, \alpha + 2\beta + 2\gamma < 1\). Then \(T\) has a fixed point.

The theorem appears as Theorem 1 in [3]. It is a special case of [2], [5], [6], and [7]. The result has also been extended to uniform spaces in [4].

References


Date: Received: 18 May 2010.
* Corresponding author
© 2010 N.A.G.
2000 Mathematics Subject Classification. Primary: 47H10.
Key words and phrases. fixed points, multivalued maps.


Department of Mathematics, Indiana University, Bloomington, IN 47405-7106

E-mail address: rhoades@indiana.edu