Abstract

A general preparation of 3-amino-1,2-oxazoles starting with the addition of ketoximes to a,b-unsaturated nitriles, was studied. The resulting O-alkyl oximes were isolated and characterized; furthermore, the transformation to the corresponding 3-amino-4,5-dihydro-1,2-oxazoles was successfully attained in yields ranging from 45 to 78%. The dehydrogenation leading to the 3-amino-1,2-oxazoles showed the following limitations: the ring must have an aryl or alkyl substituent in the 5 position, and the amino group needs to be protected. g-MnO2 gave the desired aromatization reaction in 79-87% yield.

Keywords

synthesis, 3-amino-1,2-oxazoles, aromatization, 3-amino-4,5-dihydro-1,2-oxazoles.