ABSTRACT: Three different 3-amino-2-mercaptoquinazolin-4(3H)-ones were prepared from the substituted anthranilic acids. Likewise four different chalcones were also prepared by mixed aldol condensation of four aromatic aldehydes with acetophenone. Each of the 3-amino, 2-mercapto quinazolinones was subjected to a cycloaddition reaction with chalcones, separately by heating under reflux in acetic anhydride. The product obtained in each case has been purified and characterized as the respective 2-aryl-3,4-dihydro-4-oxoquinazolin-[2,3-b]-2,3-dihydro-4-phenyl –1,3,4-thiadiazepine on the basis of their analytical and spectral data. These new fused thiadiazepines were evaluated for their locomotor, anti psychotic and muscle relaxant activities by standard methods using animal models and compared with that of standard employed.

KEYWORDS: quinazolines, antipsychotic activity, muscle relaxant activity