ABSTRACT

Knipholone, the first 4 - arylanthraquinone was discovered from the stem of Kniphofia foliosa (Asphodelaceae) in 1984 [1]. Since then a number of 4 - arylanthraquinones including knipholone anthrone have been isolated from this plant [2, 3] and other members of the Asphodelaceae, namely from Bulbine [4] and from Bulbinela species [5]. Compounds belon ging to this new class of anthraquinones have rotationally hindered biaryl linkages. The absolute configuration of knipholone and the other members was established by the use of advanced quantum chemical CD calculations [6]. Recently the first dimeric aryl anthraquinones, named joziknipholones A and B, have been discovered from the roots of Bulbine frutescens [7]. We have now reinvestigated Kniphofia foliosa and identified joziknipholone A and other anthraquinones. More significantly, we have discovered an u nprecedented tetrameric phenylanthraquinone, named jozi - joziknipholone. The structures and antiprotozoal activities of these compounds will be discussed