

A New Iridoid Compound Isolated from Aerial Parts of *Actinidia polygama* and Determination of its Antioxidant Activity

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SUMMARY. A new iridoid named as 1-keto isodehydroiridodiol (**1**) was isolated from the methanolic extract of the aerial parts of *Actinidia polygama* Miq. along with nine known compounds (**2-10**). The chemical structure of the isolated compounds was elucidated on the basis of NMR and MS spectroscopic data. All these compounds were evaluated for their free radical scavenging activities through DPPH and ABTS assays. 1-keto isodehydroiridodiol compound was found to be moderate antioxidant agent showing IC₅₀ values of 89.7 ± 2.6 and 129.6 ± 3.2 μM in DPPH and ABTS assays, respectively. While 5,7-dihydroxycromone compound expressed the best antioxidant activity showing an IC₅₀ value of 60.3 ± 0.5 μM followed by kaempferol having IC₅₀ of 67.2 ± 0.9 in DPPH assay.

RESUMEN. Se aisló un nuevo iridoide denominado 1-cetoisodehidroiridodiol (**1**) del extracto metanólico de las partes aéreas de *Actinidia polygama* Miq. junto con nueve compuestos conocidos (**2-10**). La estructura química de los compuestos aislados se dilucidó sobre la base de datos espectroscópicos de RMN y MS. Todos estos compuestos se evaluaron para determinar sus actividades de eliminación de radicales libres mediante ensayos DPPH y ABTS. Se encontró que el compuesto de 1-cetoisodehidroiridodiol es un agente antioxidante moderado que muestra valores de CI₅₀ de 89,7 ± 2,6 y 129,6 ± 3,2 μM en los ensayos de DPPH y ABTS, respectivamente. Mientras que el compuesto de 5,7-dihidroxicromona expresó la mejor actividad antioxidante mostrando un valor de IC₅₀ de 60,3 ± 0,5 μM, seguido de kaempferol que tenía IC₅₀ de 67,2 ± 0,9 en el ensayo DPPH.

KEY WORDS: *Actinidia polygama*, antioxidant activity, 1-keto isodehydroiridodiol, novel compound.

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