

## SUPPLEMENTARY MATERIAL

### A new isoflavone from the roots of *Ficus auriculata*

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### Abstract

A new isoflavone, 5,7,4'-trihydroxy-3'-hydroxymethylisoflavone (**1**), together with three known isoflavones, 3'-formyl-5,4'-dihydroxy-7-methoxyisoflavone (**2**), ficuisoflavone (**3**) and alpinumisoflavone (**4**), were isolated from the roots of *Ficus auriculata*. Among them, **1** is a rare isoflavone containing 16 carbon atoms on the carbon skeleton. The structure of **1** was elucidated by extensive spectroscopic methods and the known compounds were identified by comparisons with data reported in the literature. All compounds were evaluated for their antibacterial activities against five terrestrial pathogenic bacteria *in vitro*. Compounds **1-4** showed significant antibacterial activities against various terrestrial pathogenic bacteria with MIC values ranging from 1.30 to 39.93  $\mu\text{M}$ .

**Keywords:** *Ficus auriculata*; isoflavonoid; 5,7,4'-trihydroxy-3'-hydroxymethylisoflavone; antibacterial activities.

**Figure S1.** Selected 2D NMR correlations for 5,7,4'-trihydroxy-3'-hydroxymethylisoflavone (**1**).

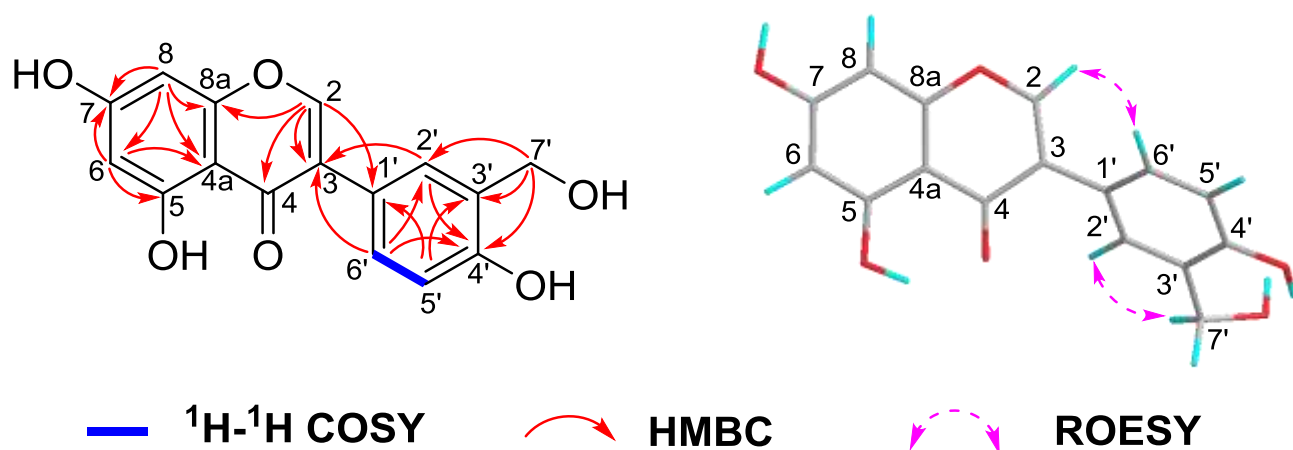
**Figure S2.**  $^1\text{H}$ -NMR spectrum of 5,7,4'-trihydroxy-3'-hydroxymethylisoflavone (**1**) in acetone- $d_6$ .

**Figure S3.**  $^{13}\text{C}$ -NMR spectrum of 5,7,4'-trihydroxy-3'-hydroxymethylisoflavone (**1**) in acetone- $d_6$ .

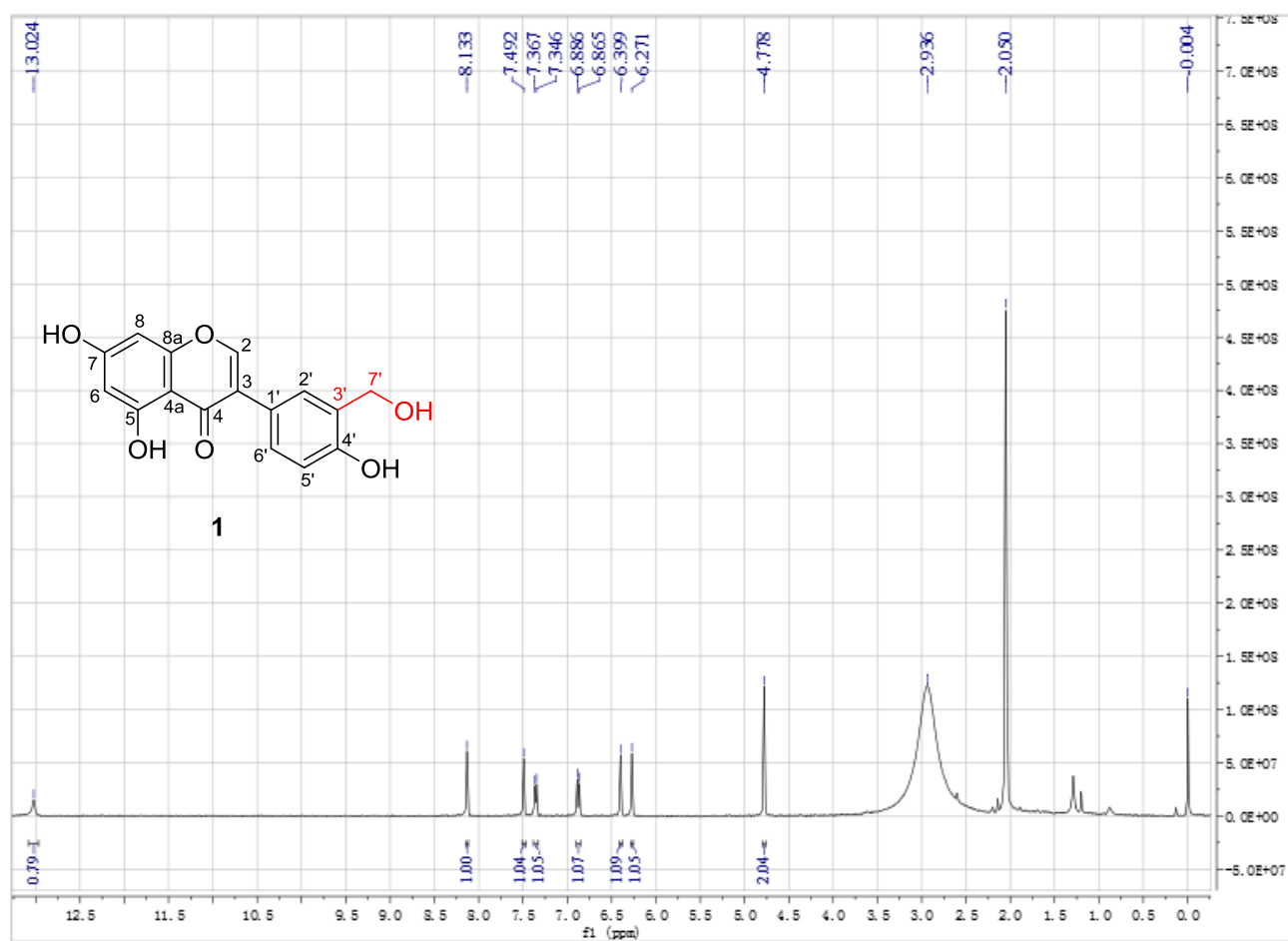
**Figure S4.** HSQC spectrum of 5,7,4'-trihydroxy-3'-hydroxymethylisoflavone (**1**) in acetone- $d_6$ .

**Figure S5.** HMBC spectrum of 5,7,4'-trihydroxy-3'-hydroxymethylisoflavone (**1**) in acetone- $d_6$ .

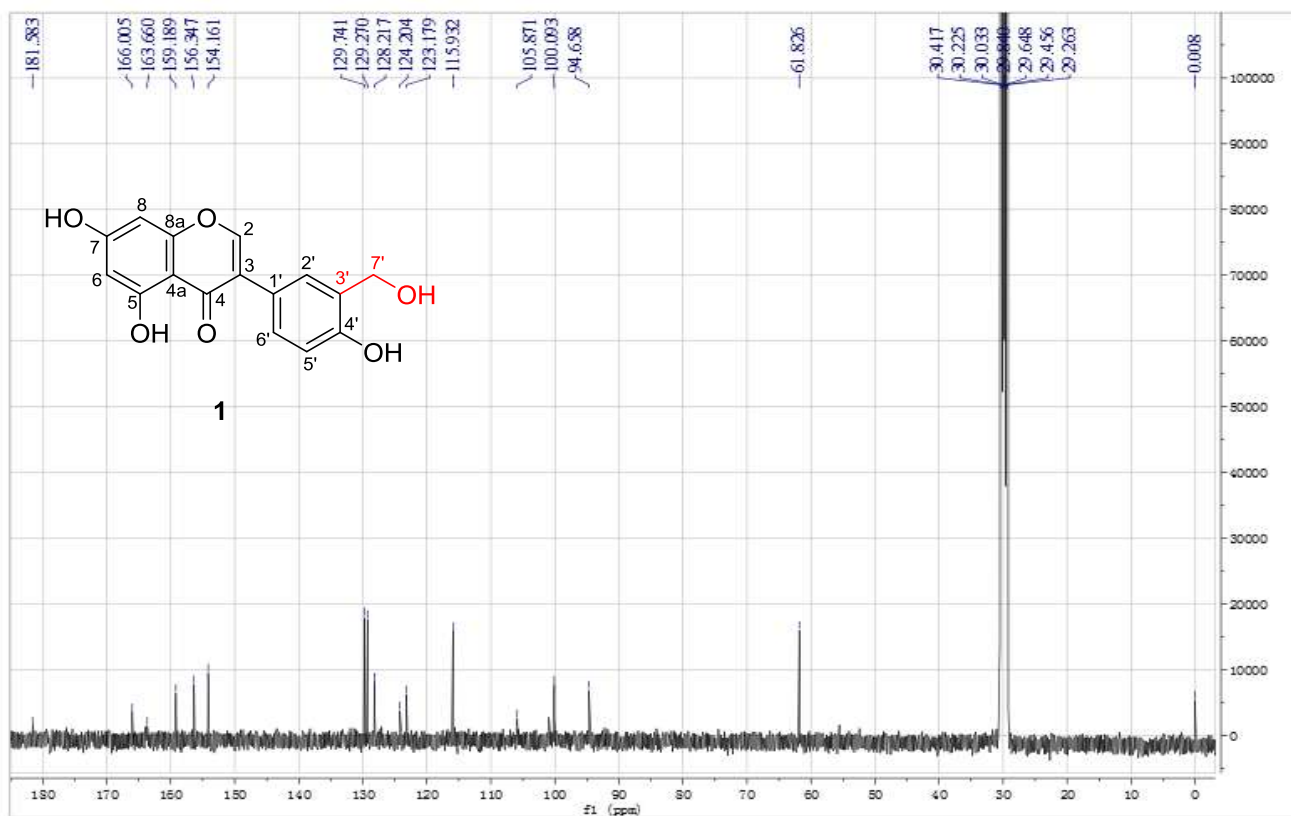
**Figure S6.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of 5,7,4'-trihydroxy-3'-hydroxymethylisoflavone (**1**) in acetone- $d_6$ .



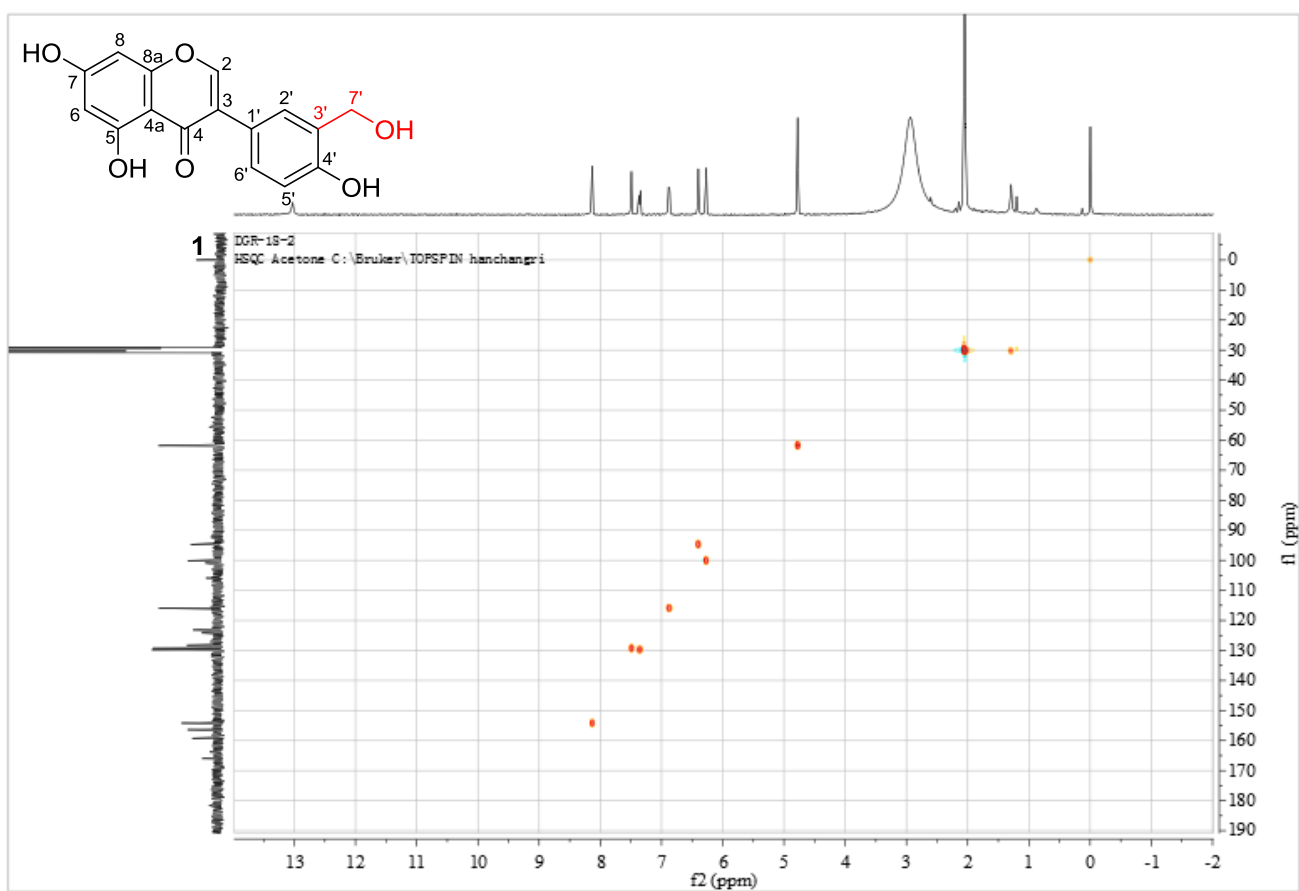
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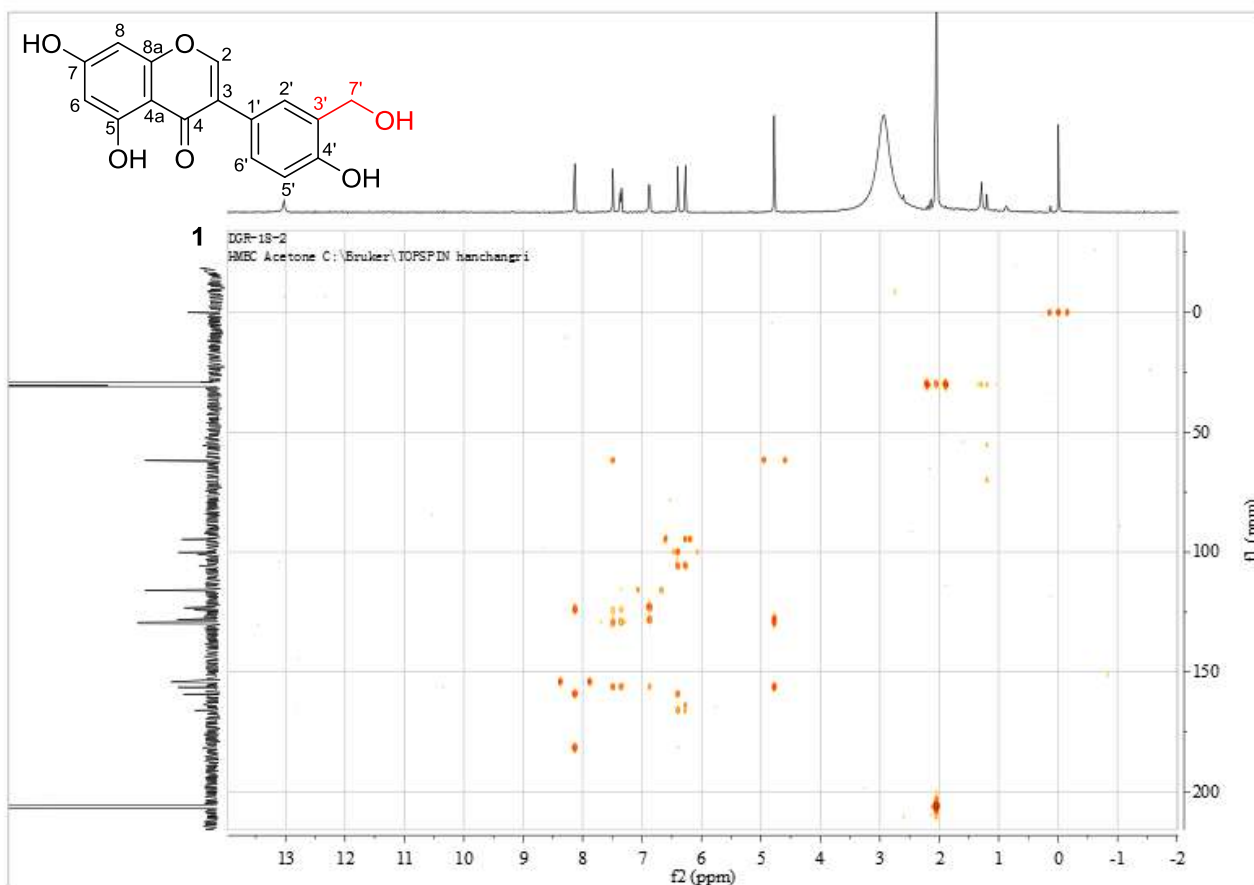
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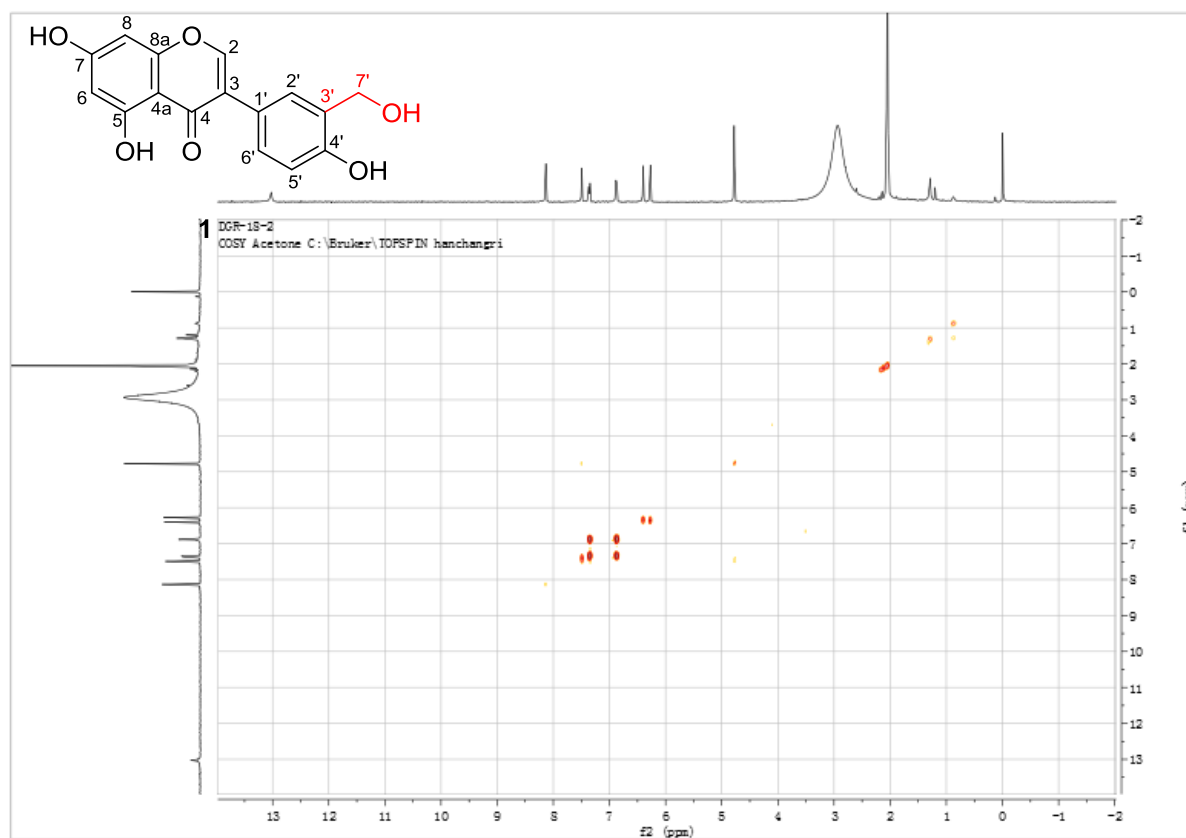
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**Figure S6.**  $^1\text{H}$ - $^1\text{H}$  COSY spectrum of 5,7,4'-trihydroxy-3'-hydroxymethylisoflavone (**1**) in acetone- $d_6$ .