Two new sesquiterpenes from *Chloranthus japonicus* Sieb

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**Abstract**

Two new sesquiterpenes, namely, 1β,10β-dihydroxy-eremophil-7(11), 8-dien-12,8-olide (1) and 8,12-epoxy-1β-hydroxyeudesm-3,7,11-trien-9-one (2), together with three known sesquiterpenoids, shizukolidol (3), 4α-hydroxy-5α(H)-8β-methoxyeudesm-7(11)-en-12,8-olide (4), and neolitacumone B (5), and two known monoterpenes, (3R,4S,6R)-p-menth-1-en-3,6-diol (6) and (R)-p-menth-1-en-4,7-diol (7), were isolated from the whole plant of *Chloranthus japonicus* Sieb. Their structures were elucidated on the basis of spectroscopic data analysis and comparison with those of related known compounds. Compounds 4-7 were isolated from this plant for the first time.

**Keywords:** *Chloranthus japonicus*; sesquiterpenes; monoterpenes
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Table S1. $^1$H NMR (500 MHz) and $^{13}$C NMR (125 MHz) data of 1 and 2 (recorded in CDCl$_3$, $\delta$ in ppm, $J$ in Hz).

| Position | Compound 1 | Compound 2 |
|----------|------------|------------|
|          | $\delta_C$ | $\delta_H$ | $\delta_C$ | $\delta_H$ |
| 1        | 74.6       | 3.88 br s  | 66.3       | 4.40 m     |
| 2        | 28.9       | 1.67 m (H-α) | 38.3       | 1.39 dd (13.3, 10.4, H-α) |
|          |            | 2.16 m (H-β) |            | 2.69 dd (13.3, 5.9, H-β) |
| 3        | 25.2       | 1.36 m (H-α) | 126.3      | 5.56 br s  |
|          |            | 1.65 m (H-β) |            |            |
| 4        | 34.2       | 2.13 m     | 135.2      |            |
| 5        | 43.0       |            | 45.6       | 2.80 m     |
| 6        | 32.8       | 2.65 d (16.4, H-α) | 21.8       | 2.42 dd (16.5, 11.9, H-α) |
|          |            | 2.44 d (16.4, H-β) |            | 2.86 dd (16.5, 4.4, H-β) |
| 7        | 148.0      |            | 137.2      |            |
| 8        | 152.2      |            | 146.1      |            |
| 9        | 110.6      | 5.79 s     | 190.2      |            |
| 10       | 74.4       |            | 46.9       |            |
| 11       | 123.4      |            | 120.7      |            |
| 12       | 170.9      |            | 144.7      | 7.39 q (1.0) |
| 13       | 8.6        | 1.91 s     | 7.8        | 2.03 d (1.0) |
| 14       | 15.5       | 0.89 d (6.9) | 15.9       | 1.10 s     |
| 15       | 15.4       | 1.01 s     | 20.7       | 1.82 d (1.5) |
Figure S1. Key HMBC, COSY and NOESY correlations for 1 and 2.
Figure S2. $^1$H NMR Spectrum of 1 in CDCl$_3$. 
Figure S3. $^{13}$C NMR Spectrum of 1 in CDCl$_3$. 
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