## Phytoecdysteroids of *Silene guntensis* and their *in vitro* Cytotoxic and Antioxidant Activity

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Phytoecdysteroids from aerial parts of *Silene guntensis* B. Fedtsch were investigated and three phytoecdysteroids were isolated: 2,3-diacetate-22-benzoate-20-hydroxyecdysone (**1**), 2-deoxy-20-hydroxyecdysone (**2**), and 20-hydroxyecdysone (**3**). Their chemical structures were elucidated by DEPT, COSY, <sup>1</sup>H and <sup>13</sup>C NMR spectroscopy. The isolated compounds **1–3** and crude extracts were evaluated for their antiproliferative and antioxidant activities. They exhibited substantial inhibition of cell growth against human cervix adenocarcinoma (HeLa), hepatocellular carcinoma (HepG-2), and breast adenocarcinoma (MCF-7) cells. The chloroform extract showed potent cytotoxic effects [IC<sub>50</sub> values (26.58  $\partial$  1.88)  $\mu$ g/mL, (20.99  $\partial$  1.64)  $\mu$ g/mL, and (18.89  $\partial$  2.36)  $\mu$ g/mL, respectively]. The new compound **1** was mildly cytotoxic compared to extracts [(127.97  $\partial$  11.34), (106.76  $\partial$  7.81), and (203.10  $\partial$  19.56)  $\mu$ g/mL, respectively]. Water and *n*-butanol extracts exhibited good antioxidant activities [IC<sub>50</sub> values of (68.90  $\partial$  6.45)  $\mu$ g/mL and (69.12  $\partial$  5.85)  $\mu$ g/mL, respectively].

Key words: Silene guntensis B. Fedtsch, Phytoecdysteroids, Antitumour and Antioxidant Activities