

## Bidesmosidic oleanane saponins from *Xerospermum noronhianum*

### Abstract

Three new oleanane-type triterpenoid saponins, 3-O-( $\alpha$ -L-rhamnopyranosyl(12)- $\beta$ -D-fucopyranosyl)-28-O- $\{[\alpha$ -L-rhamnopyranosyl(12)] [ $\beta$ -D-fucopyranosyl(16)]- $\beta$ -D-glucopyranosyl} oleanolic acid (1), 3-O-[ $\alpha$ -L-rhamnopyranosyl(13)- $\beta$ -D-fucopyranosyl]-28-O-[ $\alpha$ -L-rhamnopyranosyl(14)- $\beta$ -D-glucopyranosyl] oleanolic acid (2), and 3-O- $\{[\alpha$ -L-rhamnopyranosyl(12)-[3',4'-diacetoxy- $\beta$ -D-fucopyranosyl]]-28-O-[ $\alpha$ -L-rhamnopyranosyl(12)- $\beta$ -D-glucopyranosyl] oleanolic acid (3) have been isolated from the stems of *Xerospermum noronhianum*. The structures of the saponins were determined as a series of bidesmosidic oleanane saponins based on spectral evidence. The anticholinesterase activity of the saponins 1–3 was also evaluated.

**Keyword:** *Xerospermum noronhianum*; Saponins; Oleanane; Bidesmosides