

Steroidal and triterpenoidal saponins from the fruits of *Diploclisia glaucescens*

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In a continuation of our work on high polar secondary metabolites of Sri Lankan flora, the present investigation was carried out in order to study the minor saponins of the fruits of *Diploclisia glaucescens*. *D. glaucescens* of the family Menispermaceae is a liana growing in mid-country regions of India and Sri Lanka. We have previously reported some ecdysteroids, triterpenoidal saponins from the fruits of the plant. Chemical investigation of the high polar fraction of *n*-butanol extract from the methanol extract of fruits of *D. glaucescens* furnished a steroidal saponin 3- β -D-glucopyranosyl-20-hydroxyecdysone and two triterpenoidal saponins 3-O- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-glucopyranosylserjanic acid 28-O- β -D-glucopyranosyl ester, 3-O- β -D-xylopyranosyl-(1 \rightarrow 2)- β -D-glucopyranosyl-(1 \rightarrow 2)- β -D-glucopyranosylserjanic acid 28-O- β -D-glucopyranosyl ester. Latter triterpenoidal saponin was found to be a new natural product whereas the other two are reported for the first time from the family Menispermaceae.

The 24-hour average concentration of particulate matter less than 10 micrometers (PM₁₀) exceeded the USEPA standard (150 $\mu\text{g}/\text{m}^3$) only one day during the monitoring period. However, the 24-hour average of PM₁₀ exceeded the USEPA standard (150 $\mu\text{g}/\text{m}^3$) for most of the year. The frequency of exceedance of hourly average of PM₁₀ concentration beyond the national standard (100 $\mu\text{g}/\text{m}^3$) at the Colombo City was 10 in the year 2002 (83 h) which is a rapid increase compared to the previous years (5 in 1997, 7 in 1998, 6 in 1999).

These findings show that a policy action is required for the management of air quality in the Colombo City with a special focus on vehicular emission reduction.

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