







**Table 1: Reproducibility and accuracy analysis of Oleanolic acid ( $n = 5$ ).**

Standard	Nominal concentration ( $\mu\text{g/mL}$ )	Assay value (mean $\pm$ SD) ( $\mu\text{g/mL}$ )	Coefficient of variation (%)	Accuracy (%)
Intra-day <sup>a</sup>	50	48.02 $\pm$ 0.64	1.33	-3.96
	100	99.29 $\pm$ 0.87	0.87	-0.71
	200	205.61 $\pm$ 0.74	0.36	2.8
	300	298.29 $\pm$ 3.44	1.15	-0.57
	400	399.25 $\pm$ 2.36	0.59	-0.19
Inter-day <sup>b</sup>	50	47.96 $\pm$ 0.44	0.92	-4.09
	100	99.39 $\pm$ 0.82	0.82	-0.61
	200	205.43 $\pm$ 0.89	0.43	2.71
	300	298.27 $\pm$ 3.43	1.15	-0.58
	400	399.2 $\pm$ 2.37	0.59	-0.2

<sup>a</sup>The sample was analyzed five times within one day.

<sup>b</sup>The sample was analyzed over three consecutive days.

**Table 2: Recovery tests of the analytic methods for Oleanolic acid ( $n = 3$ ).**

Standard	Spiked amount	Assay value (mean $\pm$ SD) ( $\mu\text{g/mL}$ )	Recovery rate (%)
Oleanolic acid	0.20	0.199 $\pm$ 0.007	99.32 $\pm$ 3.50

## CONCLUSION

In this study, simple and accurate HPLC method for the quantification of OA in the flowers of plant *Gentiana olivieri* Griseb. was developed and validated. The present assay method is the first to be reported for the determination of OA in GOG plant. The whole assay can be completed within about one hour. Another advantage is that minimum sample volume (20 $\mu\text{L}$ ) is required.

It was concluded that the concentration of OA was found more in the flower (1.82mg) as compared to the whole aerial part (0.75mg). Such detection systems can be used to quantify this bioactive component in *Gentiana olivieri* Griseb and other related medicinal plants in the future. This method can be a useful tool for quality control of pharmaceutical formulations.

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## CONFLICT OF INTEREST

Authors declare no conflict of interest

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