

http://www.herbmedpharmacol.com

doi: 10.34172/jhp.2020.22



Journal of Herbmed Pharmacology

Commentary Ipolamiide and other phytoconstituents of the Gynura procumbens

Comment on: Phytoconstituents of the *Gynura procumbens* ethanol leaf extract and its fractions and their effects on viability of macrophages

Mohsen Akbari Bazm¹, and Mozafar Khazaei^{2*}

¹Student Research Committee, Kermanshah University of Medical Sciences, Kermanshah, Iran ²Fertility and Infertility Research Center, Health Technology Institute, Kermanshah University of Medical Sciences, Kermanshah, Iran

ecently, we read the article entitled "Phytoconstituents of the Gynura procumbens ethanol leaf extract and its fractions, and their effects on viability of macrophages" with many interest that has been published online in Journal of Herbmed Pharmacology (1). The paper has pointed out that Gynura procumbens (GP) with numerous beneficial pharmacological activities could be used as an adjuvant in inducing promising proliferation activity of macrophages (RAW264.7 cells). The work is amazing. However, the authors of the paper appear to have insufficient accuracy in analyzing the compounds present in GP to their molecular weight. One of the best sources to evaluate the molecular weight or m/z of any compound of the "PubChem" site is that Ipolamiide (PubChem CID: 442425) with a m/z of 424.1822 appears to be a terpene compound with a molecular weight of 406.4 g/mol (M-H ~ 405 g/mol and M+H ~407 g/mol) (2,3). Other combinations of this compound (glucoside or 6\beta-hydroxy-ipolamiide) can have different molecular weights that the type of which is accurately mentioned (4). Other compounds also appear as follows: Decenedioic acid, with a molecular weight of 200.23 g/mol, PubChem CID: 181528, M-H ~199 g/mol and M+H~201 g/mol while the m/z is mentioned in article 218.1384 (5), 2,3-dinor Thromboxane B₁ (2,3-Dinor-TXB1), with a molecular weight of 342.5 g/mol, PubChem CID: 52921884, M-H ~341 g/mol and M+H ~343 g/ mol while the m/z is mentioned in article 362.2541 (6). Homoesperetin 7-rutinoside, with a molecular weight of 624.6 g/mol, PubChem CID: 42607988, M-H ~623 g/ mol and M+H ~ 625 g/mol while the m/z is mentioned in article 642.2401 (7) and 11-hydroperoxy-12,13epoxy-9-octadecenoic acid, with a molecular weight of 328.4 g/mol, PubChem CID: 5282862, M-H ~327 g/mol and M+H ~329 g/mol while the m/z is mentioned in article 346.259 (8). Since two factors (Acquisition time and Counts (Mass-to-charge) ×104) are important in

Received 26 August 2019, Accepted 20 November 2019

identifying compounds in interpreting the results of the LC-MS, it is best to compare the results with respect to these two factors in Tables 1–5. In addition, in the LC-MS technique, all the peaks recorded in the chromatogram are recorded precisely according to the Acquisition time and Counts (Mass-to-charge) $\times 10^4$ of each, so it is best to add all peaks in the tables accurately (9).

Conflict of interests

The authors declare that they have no conflict of interest.

Ethical considerations

Not applicable.

References

- Manogaran M, Lim V, Mohamed R. Phytoconstituents of the Gynura procumbens ethanol leaf extract and its fractions and their effects on viability of macrophages. J Herbmed Pharmacol. 2019;8(3):224-30. doi: 10.15171/jhp.2019.33
- 2. Ipolamiide. https://pubchem.ncbi.nlm.nih.gov/compound/ Ipolamiide
- 3. Ipolamiide. http://www.chemspider.com/Chemical-Structure.390865.html.
- Vestena A, Comerlato L, Bridi H, Guerini L, Ccana-Ccapatinta GV, Vignoli-Silva M, et al. Chrysoeriol derivatives and other constituents from Glandularia selloi. Phytochem Lett. 2019;29:30-4.
- Decenedioic-acid. https://pubchem.ncbi.nlm.nih.gov/compound/Decenedioic-acid.
- 6. https://pubchem.ncbi.nlm.nih.gov/compound/2_3-Dinor-TXB1#section=Related-Compounds.
- 7. Homoesperetin 7-rutinoside. https://pubchem.ncbi.nlm. nih.gov/compound/Homoesperetin-7-rutinoside.
- 11-Hydroperoxy-12,13-epoxy-9-octadecenoic acid. https:// pubchem.ncbi.nlm.nih.gov/compound/5282862.
- Akbari Bazm M, Khazaei M, Khazaei F, Naseri L. Nasturtium Officinale L. hydroalcoholic extract improved oxymetholone-induced oxidative injury in mouse testis and sperm parameters. Andrologia. 2019;25:e13294. doi: 10.1111/and.13294.