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### **A new urease inhibitors from *Ferula narthex* Boiss**

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The current study was designed to evaluate the urease inhibitory activities of fractions of *Ferula narthex* Boiss followed by bioassay guided isolation of new urease sesquiterpene coumarins, as potential urease inhibitors. The chloroform and ethyl acetate fractions were found significantly active against urease enzyme with IC<sub>50</sub> values of 42.5±1.72 and 169.3±2.54 µg/mL, respectively. Upon fractionation of chloroform the compounds 2-5 were isolated and compound 1 was isolated from ethyl acetate. The compounds 2, 3 and 5 demonstrated good urease inhibition with IC<sub>50</sub> values in range of 116±1.29-464.43±5.50 µM. Molecular docking studies of active compounds (2, 3 and 5) were carried out, in order to know the binding mode of interaction and energy minimization in the active site of urease. In short, both the extract/fractions and isolated compounds showed marked urease inhibition and thus could be a useful natural source of urease inhibition.

### **Biography**

Mahboob Alam is currently working as an Assistant Professor at Department of Pharmacy, The University of Lahore Islamabad Campus Pakistan. His field of specialty is Pharmacognosy. His field of interest is natural products, drug discovery and biological assays. He has completed his PhD from University of Peshawar, Pakistan in 2013.

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