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INVESTIGATION OF ESSENTIAL OIL COMPOSITION OF BOTHRIOCHLOA BLADHII FROM MAHARASHTRA, INDIA

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ABSTRACT

Pharmaceutical industries utilize natural essential oils extract from different aromatic plants in production of different medicines, flavor and fragrance. The aromatic grass *Bothriochloa bladhii* belong to family Poaceae. The aromatic oil was extracted from dried aerial parts of naturally growing *B. bladhii*. The oil was analyzed by Gaschromatographic and mass spectrometric (GC-MS). The major constituents of essential oil from dried sample of *B. bladhii* is bicyclic monoterpen hydrocarbons (70.52%), tricyclic monoterpen hydrocarbons (27.39%), transition metal (1.46%) keton group (0.39%) and mono-cyclic saturated hydrocarbon (0.24%). The major compounds identified from the sample were camphene (41.39%), α-pinene (27.83%) and tricyclene (27.39%). Whereas the minor compounds of essential oil is bornylene (1.30%) and molybdenum (1.46%). The essential oil is rich in camphene, α-pinene and tricyclene which are significantly higher than previous reports. The cyclopentane and ethanon reported in trace amount for the first time in present investigation.

KEY WORDS: *Bothriochloa bladhii*, Essential oil, Chemo-variant species, Poaceae, Maharashtra.