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Ageratum houstonianum Mill.

Addition to Angiosperm diversity of Doaba Region of Punjab, India (Kaur et al., 2017)

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ABSTRACT

Ageratum houstonianum Mill. is an invasive species belonging to family Asteraceae recorded from Doaba region of Punjab, India. It is an addition to Angiosperm diversity of Doaba region compiled by Kaur et al., (2017).

Keywords: Angiosperm diversity; Doaba Region; Asteraceae

1. INTRODUCTION

Genus *Ageratum* L. consists of 30 species which is belonging to family Asteraceae (Okunade, 2002). Literally, *Ageratum* is a Greek word which means non ageing. According to Gill and Garg, (2016) tubular, white or blue corolla and absence of ray florets are the important characters of these genera.

Sharma, (1990) was compiled a checklist of plant species from the state of Punjab, India and documented *A. conyzoides* and one subspecies as *A. conyzoides* sub sp *houstonianum* (Mill.). Gill and Garg, (2016) studied two species of genus *Ageratum* (*A. conyzoides* and *A. houstonianum*) from North West India and differentiated these species on the basis of morphological and cytological characters.

Few reports such as Sharma et al., (2009), Manhas et al., (2010), Rawat et al., (2013), Kaur et al., (2017) and Kaur, (2021) are available about flora of Doaba region but there is no information about occurrence of *Ageratum houstonianum* Mill. Keeping this in view, present study was conducted for updated information about the occurrence of second species of the genus *Ageratum*.

2. MATERIAL AND METHODS

Study area

Punjab state is present in Northern part of the India and divided into three regions *viz*. Majha, Doaba and Malwa. Doaba region consists of four districts such as Jalandhar, Hoshiarpur, Kapurthala and Nawanshahar.

Collection and taxonomic identification

The plant material was collected in the month of April, 2023 from District Hoshiarpur, Punjab, India. Morphological features (leaf, stem, flower, involucral



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bract etc.) were examined for identification of species. Available literature and online websites were consulted for establishment of identity of the species.

3. RESULTS AND DISCUSSION

Present study was conducted in April 2023 in district Hoshiarpur (Doaba region), Punjab, India. Morphological features were studied for accurate identification of the species.

Morphologically, Plant is erect or some time semi erect branched herb. Height varies from 25cm- 40cm. Stem is thick, hairy, branched green to violet green or light brown in color. Leaves are ovate, apex acute cordate base, hairy and green. Leaf size varies from 2cm x 5cm to 4cm x 9cm. Capitulum purple, homogenous, involucral bracts hairy (Figure 1).

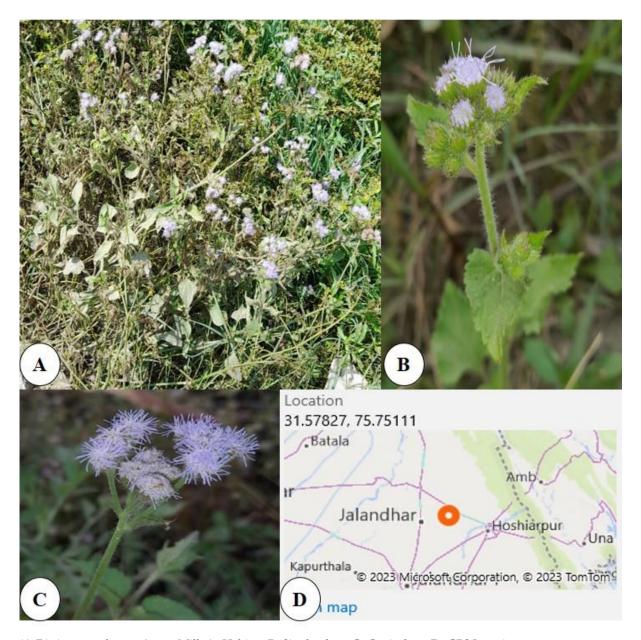


Figure 1 (A-D) Ageratum houstonianum Mill. A- Habitat; B- Single plant; C- Capitulum; D- GPS Location

Flowering and fruiting

Almost throughout the year

Previously, only one species of *Ageratum (A. conyzoides*) from the study area was recorded by Sharma et al., (2009), Rawat et al., (2013), Kaur et al., (2017) and Kaur, (2021). Manhas et al., (2010) documented two species of *Ageratum (A. conyzoides* and *Ageratum*

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sp.). They were not specifying the name of second species. Therefore, *Ageratum houstonianum* Mill. is an addition to the floristic compositions of the investigated area.

4. CONCLUSION

Ageratum houstonianum Mill. is a new distributional record for Doaba region. This study is valuable for taxonomists, researchers, scientists etc. for accurate identification of species.

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Informed consent

Not applicable.

Ethical approval

The ethical guidelines for plants & plant materials are followed in the study for sample collection & identification.

Conflicts of interests

The authors declare that there are no conflicts of interests.

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Data and materials availability

All data associated with this study are present in the paper.

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