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Collection and diagnosis of some wild plants in the vicinity of Samarra University, Iraq

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ABSTRACT

The current study diagnosed 24 plant species distributed over 12 plant families from several gardens at the University of Samarra during the flowering period, and they were diagnosed by experts from the Iraqi National Herbarium. *Centaurea* sp., *Eclipta prostrata, Silybum marianum, Sonchus oleraceus, Sphagneticola trilobata* and *Taraxacum officinale,* followed by the Brassicaceae family, which included three genera, namely *Eruca vesicaria, Lepidium draba* and *Sisymbrium irio,* while the rest of the two families ranged between one to two genus.

Keywords: Plant, Diversity, Floristics, Identification.
Article type: Short Communication.

INTRODUCTION

Bush plants can be defined as misplaced developing plants (Illinois & Hilty 2019) and exhibit the ability to reproduce and spread despite all the constraints. They are highly competitive plants in nature due to their excellence with specifications that help them adapt to growth in different environments. Bush plants are usually spread by seeds and vegetables. Spreading seeds is the most common method of bush and, many of which produce very large amounts of seeds. One spandex plant produces over 17,000 seeds and a single *Cuscuta* sp. about 16,000, while *Convolvulus* sp., over 800. The seeds of bush are spread in several media according to their characteristics, part of which is transmitted by wind such as the alliance or with water such as the acidity or by animals and humans such as the glaze or by agricultural machinery and machinery. Many bush plants are spread greenly with rhizomes and stolons (Abdullah *et al.* 2015; Eloff & Shuping 2017). There are also some studies about plant floristic and diversity around the world (Saeidi Mehrvarz *et al.* 2015; Mehravaran *et al.* 2016; Milani *et al.* 2017; Mirhashemi *et al.* 2021; Kudryavtsev *et al.* 2021; Abolhasani *et al.* 2021; Al- Abbasi *et al.* 2021).

METERIALS AND METHODS

The present study was conducted at Samarra University in Salaheddine Province, Iraq from January 7, through February 7, 2021. A total of 24 samples of wild plants from the all university gardens were diagnosed based on flora classification keys (Rechinger 1964). To confirm the diagnosis, experts from the Iraqi national grass and kurdish grass were used in northern Iraq. In this study, the ruler was used to measure the lengths of plants and the digital camera to photograph samples collected, and special papers and files were used to preserve samples to display photography and diagnosis.

RESULT AND DISCUTION

Twenty-four vegetarian species were diagnosed in 12 families at the University of Samarra, Salahuddin Province, including eight Asteraceae genus: *Anthemis maritima, Calendula* sp., *Centaurea* sp. *Eclipta prostrata, Silybum*

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marianum, *Sonchus oleraceus*, *Sphagneticola trilobata* and *Taraxacum officinale*; brassicaceae family including three genus; *Eruca vesicaria*, *Lepidium draba* and *Sisymbrium irio*, while the Amaranthaceae, Fabaceae and Plantaginaceae each contained two genus including *Amaranthus viridis*, *Chenopodiastrum murale*, *Medicago polymorpha*, *Melilotus indicus*, *Plantago lanceolate* and *Veronica agrestis* respectively. Boraginaceae and Malvaceae contained one genus in a row: *Anethum graveolens*, *Erodium cicutarium*, *Rumex scutatus*, *Stellaria media*, *Euphorbia peplus*, *Heliotropium europaeum*, *Malva parviflora* (Fig. 1).

This study showed that the Asteraceae family outperforms the rest of the families and this is consistent with the other authors (Companion 2018; Mabberley 2017; Christenhuz James 2016; Zareh 2005; AL-Samarraie *et al.* 2014) exhibiting that Asteraceae is one of the largest and most prevalent plant families in all environments.

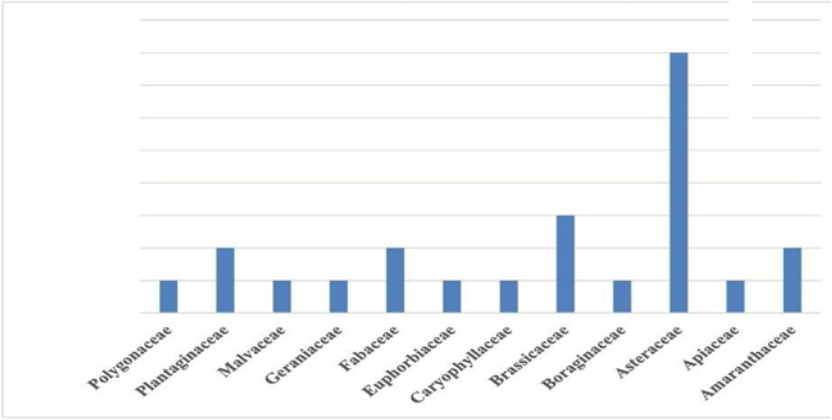

Fig. 1. Discovered types of push plants.

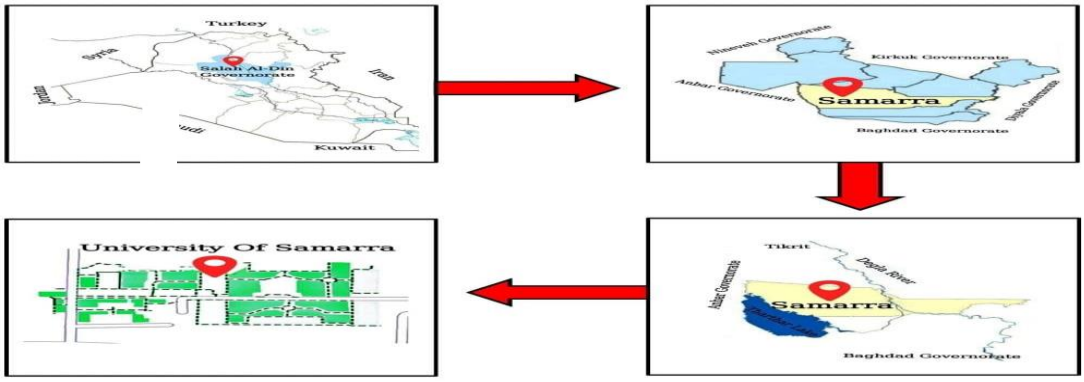

Fig. 2. The study area.

Fig. 3. The diagnosed types.

Fig. 3. (continued). The diagnosed types.

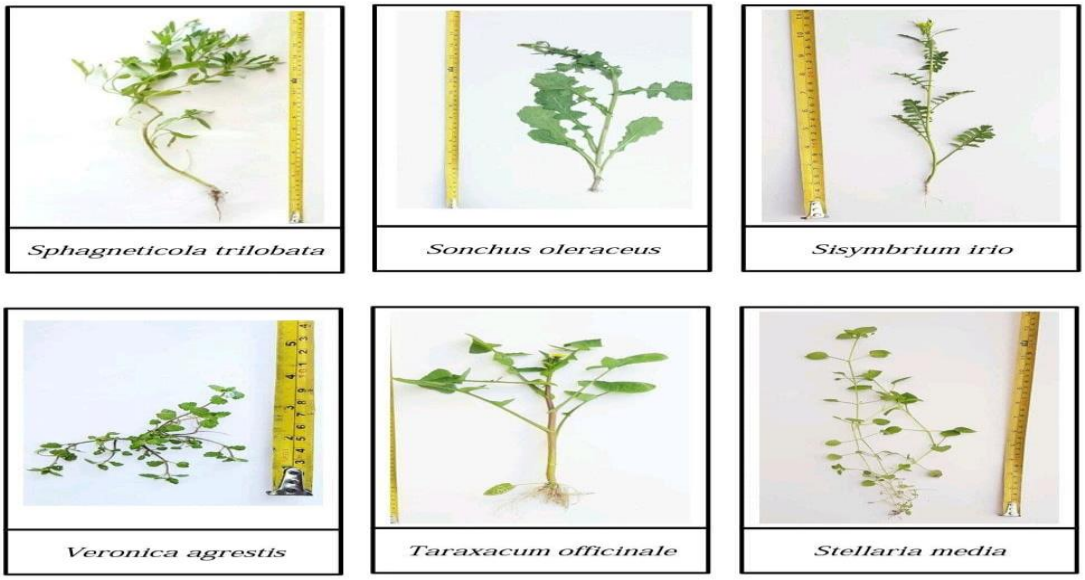

Fig. 3. (continued). The diagnosed types.

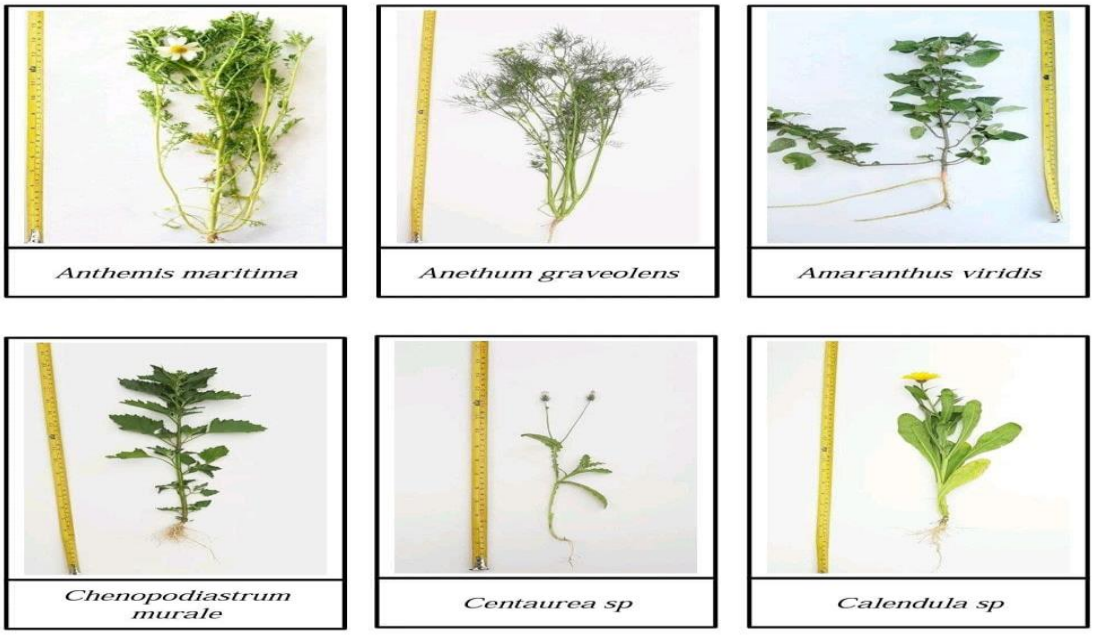

Fig. 3. (continued). The diagnosed types

CONCLUSION

The Iraqi environment is rich in wild plant species, and this in itself is a huge wealth that can be used in several fields. The two families Asteraceae and Brassicaceae are superior to all the plant families in the current study.

REFERENCES

Abdullah, SK, Al-Samarraie, MQ, & Al-Assie, AH 2015, Fungi associated with grapevine (*Vitis vinifera* L) decline in middle of Iraq. *Egyptian Academic Journal of Biological Sciences, G. Microbiology,* 7: 53-59.

Abolhasani, F, Kharazian, N, Jalilian, N 2021, Floristic studies, life forms and chorology of Kouh-payeh area in Isfahan Province. *Caspian Journal of Environmental Sciences,* 19: 59-73.

Al- Abbasi, SH, A, Al-Majmaei, AAM, Al-Naqib, ATH, Hameed, AM, AL-Samarraie, MQ, Altaef, AH 2021, Isolation and identification of some fungi from rhizospheric soils of some wild plants at Samarra University, Iraq. *Caspian Journal of Environmental Sciences*, 19: 829-839.

AL-Samarraie, MQ, & Al-Assie, AH 2014, New records of some saprophytic and pathogenic fungi isolated from declining grapevine in Salahaldin Province, middle Iraq. *Tikrit Journal of Pure Science*, 19(5).

Christenhuz, JMC & James, WB 2016, The number of known plants species in the world and its annual increase. *Phytotaxa* 2.

Hilty, J 2019, Illinois wildflowers: field bindweed. https://www.illinoiswildflowers. info/weeds/plants/field_bindweed.htm. Accessed: December 30.

Kudryavtsev, N, A, Zaitseva, L, A, Savoskina, O, A, Chebanenko, S, I, Zavertkin, I, A 2021 Herbological and agrotechnological approaches to weeding plants in modern flax growing. *Caspian Journal of Environmental Sciences*, 19: 903-908.

Mabberley, DJ 2017, Mabberleys plant-book: A portable dictionary of plants, their classification and uses. Cambridge University Press, Cambiridge, UK, 1102 p.

Mehravaran, S, Naqinezhad, A & Jafari, N 2016, Diversity of macrophytes and microphytes in an urban wetland, Babol, Mazandaran Province, Iran; toward a conservation policy. *Caspian Journal of Environmental Sciences*, 14: 191-204.

Milani, E, Saeidi Mehrvarz, S, Gholizadeh, H 2017, Floristic, life form and chorological studies of the Abshar protected area, Shirgah, Mazandaran Province, north of Iran, *Caspian Journal of Environmental Sciences*, 15: 165-180.

Mirhashemi, H, Moradi, F, Pourbabaei, H, Mezbani, F 2021, Changes in flora, life forms and geographical distribution of herbaceous plant species along an altitudinal gradient in oak forests, Iran. *Caspian Journal of Environmental Sciences,* 19: 619-627.

Rafiqa, Al-Bazada 2018, Study the environment and biology of the most important weeds with watered crops in the Upper Stivian Highlands. PhD Dissertation, Farhat Abbas University, Setif 1, Faculty of Nature and Life Sciences, Republic of Algeria.

Rechinger, KH 1964, Flora of Lowland Iraq. Antiquariat Bookfarm (Löbnitz, Germany), pp. 389-398.

Saeidi Mehrvarz, S & Ashouri Nodehi, M 2015, A floristic study of the Sorkhankol Wildlife Refuge, Guilan province, Iran. *Caspian Journal of Environmental Sciences,* 13: 183-196.

Shuping, DSS & Eloff, JN 2017, The use of plants to protect plants and food against fungal pathogens: A review. *African Journal of Traditional, Complementary and Alternative Medicines,* 14: 120-127.

Zareh, MM 2005, Review synopsis of the Family Asteraceae in Egypt. *International Journal of Agriculture and Biology*, 7 (5): 83

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