

# Toxic effects of Iranian ox-tongue (*Echium amoenum Fisch. & Mey.*) as herbal drug for anxiety: the knowledge of Iranian students

## Abstract

In this study we asked questions about Iranian ox-tongue (*Echium amoenum Fisch. & Mey.*) and 40 Iranian students in department of psychology answered them. The answers about toxic effects of Iranian ox-tongue (*Echium amoenum Fisch. & Mey.*) Shows that 80% of participants believe that there are no toxic effect whereas in common population and in scientific articles in Persian there are clear suggestion about its effect on blood pressure. According to this study, it is suggested that Iranian students in psychology and other majors related to mental health need more information about toxic effects of herbal drugs which are easily accessible in spicery stores.

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## Introduction

Pathologic anxiety is a mental disorder with a cluster of signs and symptoms like agitation, nervousness, distressing desire, concern about some uncertain events and large physical signs such as restless, high heart beats and sense of problems in breath that make more worry and anxiety in patient.<sup>1,2</sup> In Iran because of the history of herbal drugs recommended in medical books by Avicenna, al-Razi, Ismail al-Jurjani and other physicians, there is a positive view about herbal medicine. A wide range of herbal drugs in drinking forms, spicery forms used in the kinds of food, aromatic forms, ointments, essential oils and scrubbing creams are in reach. These productions can be found in spicery stores named "Attari" in Persian. A common herbal drinking drug in Iran for control the anxiety is Iranian ox-tongue (*Echium amoenum Fisch. & Mey.*). It belongs to Boragianaceae family and its' flowers and leaves are the main medical parts.<sup>3-6</sup> In recommended advices about drinking form of Iranian ox-tongue (*Echium amoenum Fisch. & Mey.*), it is a common belief that after drinking, the patient should not be in the situations or relationships that make patient nervous and agitated.

## Material and method

In this study we asked 40 Iranian students in department of psychology, Naein branch, IAU these questions:

- Would you please write what you know about Iranian ox-tongue (*Echium amoenum Fisch. & Mey.*)?
- Do you know its usages?
- Do you know its toxic effects?

## Findings and discussion

The answers of questions are presented in charts 1, 2 and 3.

Figure 1 shows that the participants' knowledge about color (84%) and the other external features was more than their other information. In Figure 2, the benefits and usage of it are shown. The answers are about sleep (60%), headache (56%), and sedative effects (70%). Control of nervousness is reported 40% in responses and unclear answers is seen in 20% of cases. The answers to 3th question about toxic effects

of Iranian ox-tongue (*Echium amoenum Fisch. & Mey.*) shows that 80% of participants believe that there are no toxic effect and only 20% stated that its uses may lead to high blood pressure.

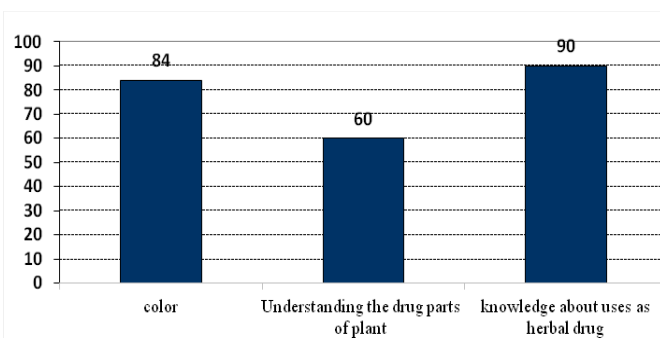


Figure 1 Content of answers to question 1.

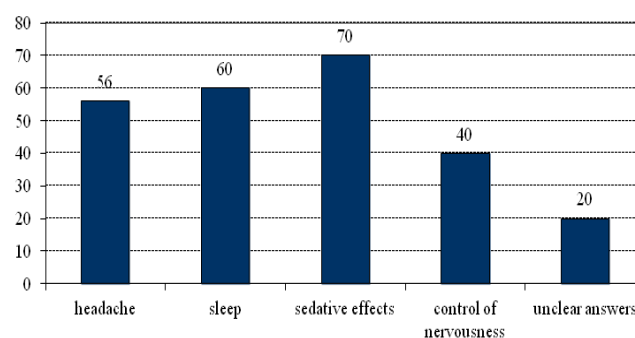
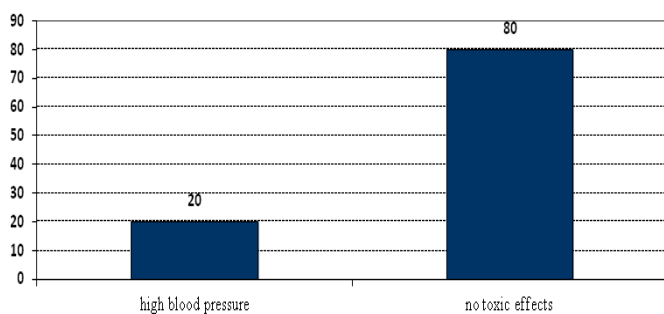


Figure 2 Content of answers to question 2.

According to the findings, it can be concluded that the knowledge about Iranian ox-tongue (*Echium amoenum Fisch. & Mey.*) as a herbal drug for anxiety is noticeable in students population in psychology but their knowledge on its toxic effects are not significant. Non of them did not write about appropriate doses of drinking form of Iranian ox-tongue (*Echium amoenum Fisch. & Mey.*) for anxiety.

The yellow web pages in Persian state that the appropriate dose of drinking production of Iranian ox-tongue (*Echium amoenum* Fisch. & Mey.) is 5gr. Per 200-300 mg boiled water. Its usage may lead to a serious condition of high blood pressure (6) and it appears that based on this, the common population says it should not be used in neuroticizing situation. To control high blood pressure drinking it with lemon is usual, although the participants in present study did not know it.



**Figure 3** Content of answers to question 3 about toxic effects of Iranian ox-tongue (*Echium amoenum* Fisch. & Mey.).

## Conclusion

According to this study, it is suggested that Iranian students in psychology and other majors related to mental health need more information about toxic effects of herbal drugs which are easily accessible in Attaries and spicery stores.

## Acknowledgments

None.

## Conflicts of interest

The authors declare that there is no Conflict of interests.

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