

# AZ ECHINEACEAE PURPUREAE HERBA KIVONATAIBÓL POLIFENOLOK KIMUTATÁSA VOLTAMETRIKUS MÉRÉSSSEL

## DETECTION OF POLYPHENOLS OF ECHINEACEAE PURPUREAE HERBA EXTRACTS BY VOLTAMMETRIC MEASUREMENT

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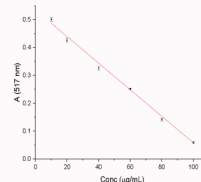
**Keywords:** purple cornflower, phenolic compounds, antioxidant capacity

### Abstract:

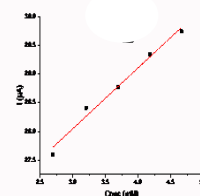
Genus *Echinacea* includes 9 species, three of which are with medical importance: *Echinacea purpurea* (L) Moench, *Echinacea pallida* Nutt. and *Echinacea angustifolia* DC. The aim of our work was to investigate the phenolic compounds and antioxidant capacity of the extracts obtained from the aerial parts of *Echinacea purpurea* (L) Moench by voltammetric measurements.

In order to determine the free radical scavenging activity, we compared the extracts of the different parts of the purple cornflower with standards and found that the leaves have the best antioxidant capacity. Lower antioxidant capacity was found in the stem of *Echinacea*, followed by the flowers.

When determining the total amount of polyphenols from the extracts of the leaves, flowers and stems of *Echinacea*, we found that the leaves contain the highest amount of polyphenols, followed by the flowers and stems.



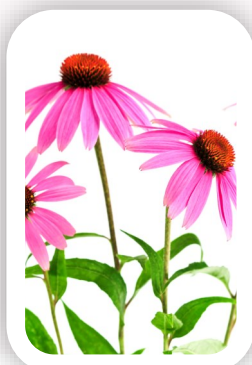
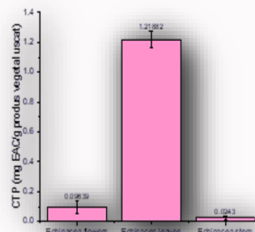
Standard calibration curves to determine the free radical scavenging activity



Standard calibration curves to determine the total amount of polyphenols

Fragmented stems and leaves of *Echinacea purpurea* (L) Moench

### Results antioxidant activity



### Conclusions

Our results showed that the leaves of *Echinacea purpurea* (L) Moench are rich sources of phenolic compounds, and in this context, they have radical scavenging and reducing power.

### References

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