

## Determination Of Antioxidant, Total Phenol And Flavonoid Contents Of Three Endemic *Rhaponticoides* Species

**Yashar Akbar Hameed HAMEED , Yavuz BAĞCI**

*Selçuk University, Faculty of Science, Department of Biology, Konya, TURKEY*

[yasharhameed@gmail.com](mailto:yasharhameed@gmail.com)

In this study 3 endemic *Rhaponticoides* species (*Rhaponticoides aytachii*, *Rhaponticoides iconiensis*, *Rhaponticoides gokceoglu*) that were collected from different part and regions of Turkey (Konya-Seydişehir, Karaman-Sarıveliler, Antalya-İbradi) are examined for the purpose of maintaining the amount of Flavonoid, Total phenol and Antioxidant on whole, DPPH procedure is used for determining the Antioxidant activity, as for that the analyzes; the highest percentage of DPPH is located at *Rhaponticoides gokceoglu* with the number of (% 36.52) decreasingly followed by *Rhaponticoides iconiensis* (% 26.75) and *Rhaponticoides aytachii* (% 12.05). Folin-Ciocalteu Technique that has modified by Singleton and Rossi in 1965 is used to specify Total phenol amount, with reference to the analyzes which were made; The highest percentage in terms of Total Phenol is owned to *Rhaponticoides aytachii* (26,56 mgGAE/g) and decreasingly followed by *Rhaponticoides iconiensis* (18,70 mgGAE/g) and *Rhaponticoides gokceoglu* (16,27 mgGAE/g). Aluminum chloride (ALCl<sub>3</sub>) colorimetric method that was improved by Woisky and Salatino in 1988 is applied to bring into open the total Flavonoid rate. The highest percentage of Flavonoid is found at *Rhaponticoides iconiensis* (11,12 mgKE/g) and decreasingly followed by *Rhaponticoides aytachii* (9,32 mgKE/g) and (6,70 mgKE/g) in *Rhaponticoides gokceoglu*.

- [1] Çinbilgel, İ., Eren, Ö. And Duman, H., "Rhaponticoides gokceoglu (Asteraceae), a striking new species from Turkey" Phytotaxa.- 2014.- 170 (2), 125-132.
- [2] S., Bağcı, Y. And Dinç, M." Rhaponticoides aytachii sp. nov.(Asteraceae) from south Anatolia, Turkey" nordic Journal of Botany.- 2009.- 27 (6), 479-482.
- [3] Li, H.-B., Wong, C.-C., Cheng, K.-W. And Chen, F. " Antioxidant properties in vitro and total phenolic contents in methanol extracts from medicinal plants" LWT-Food Science and Technology.-2008.- 41 (3), 385-390.