



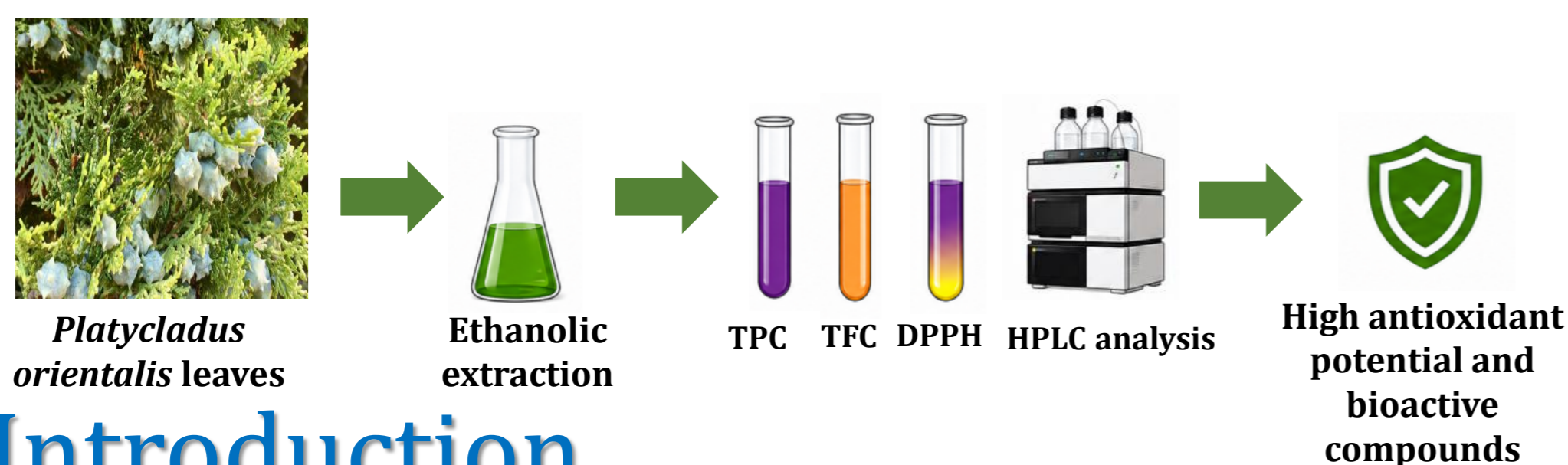
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PHYTOCHEMICAL PROFILE AND ANTIOXIDANT ACTIVITY OF PLATYCLADUS ORIENTALIS LEAVES

Doris FLOARES (OARGA)¹, Diana OBISTIOIU¹, Anca HULEA¹, Iuliana POPESCU¹,
 Ersilia ALEXA², Isidora RADULOV¹
*Faculty of Agriculture¹, Faculty of Food Engineering², University of Life Sciences
 "King Mihai I" from Timisoara, Romania*

Abstract:



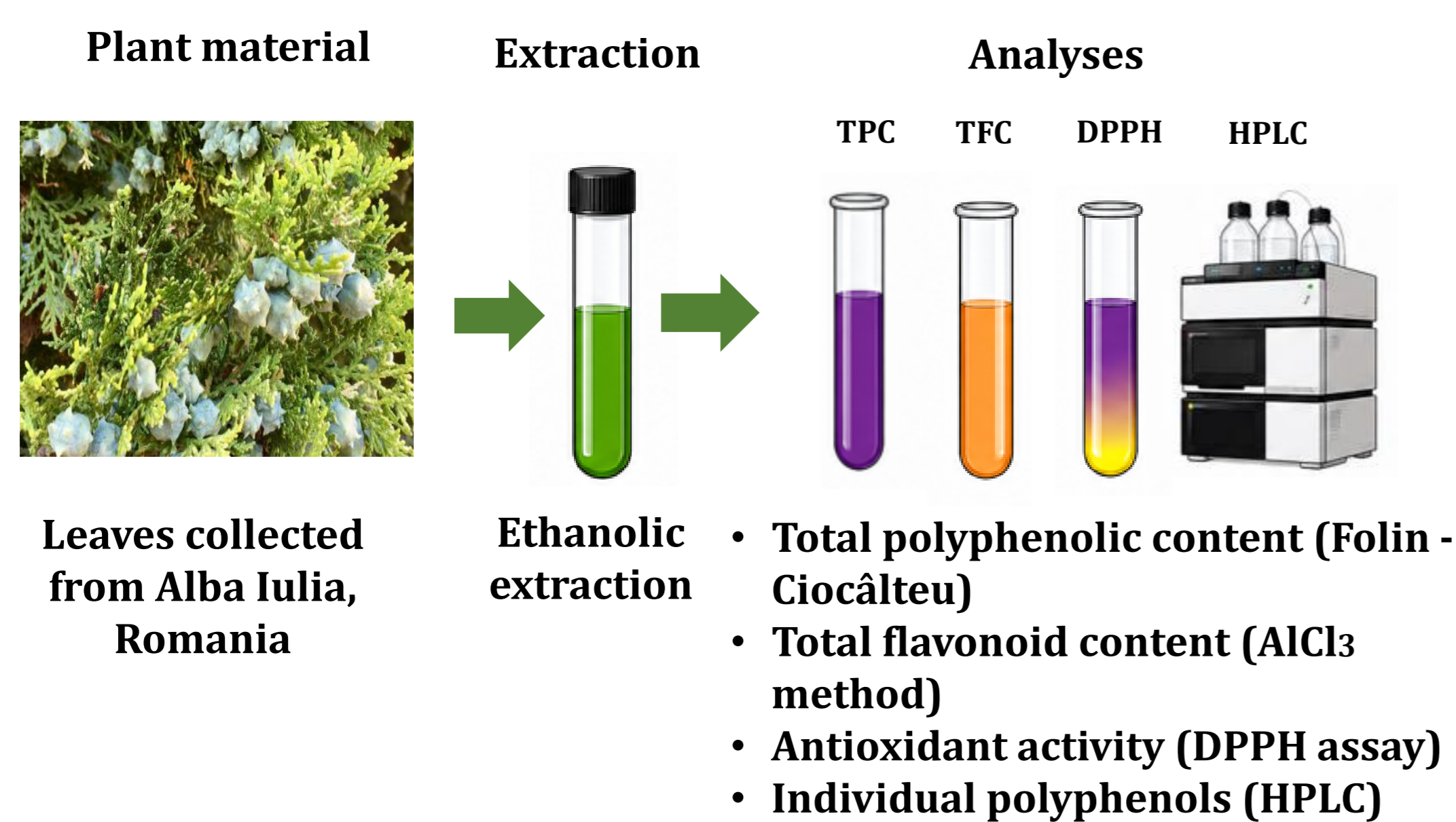
Introduction

- Medicinal plants are important sources of bioactive compounds with antioxidant potential and health benefits.
- Platycladus orientalis* (Cupressaceae) is traditionally used for various ailments and exhibits antimicrobial, anti-inflammatory, and antioxidant activities.
- Although polyphenols and flavonoids were previously reported in this species, detailed quantitative data on individual compounds remain limited.

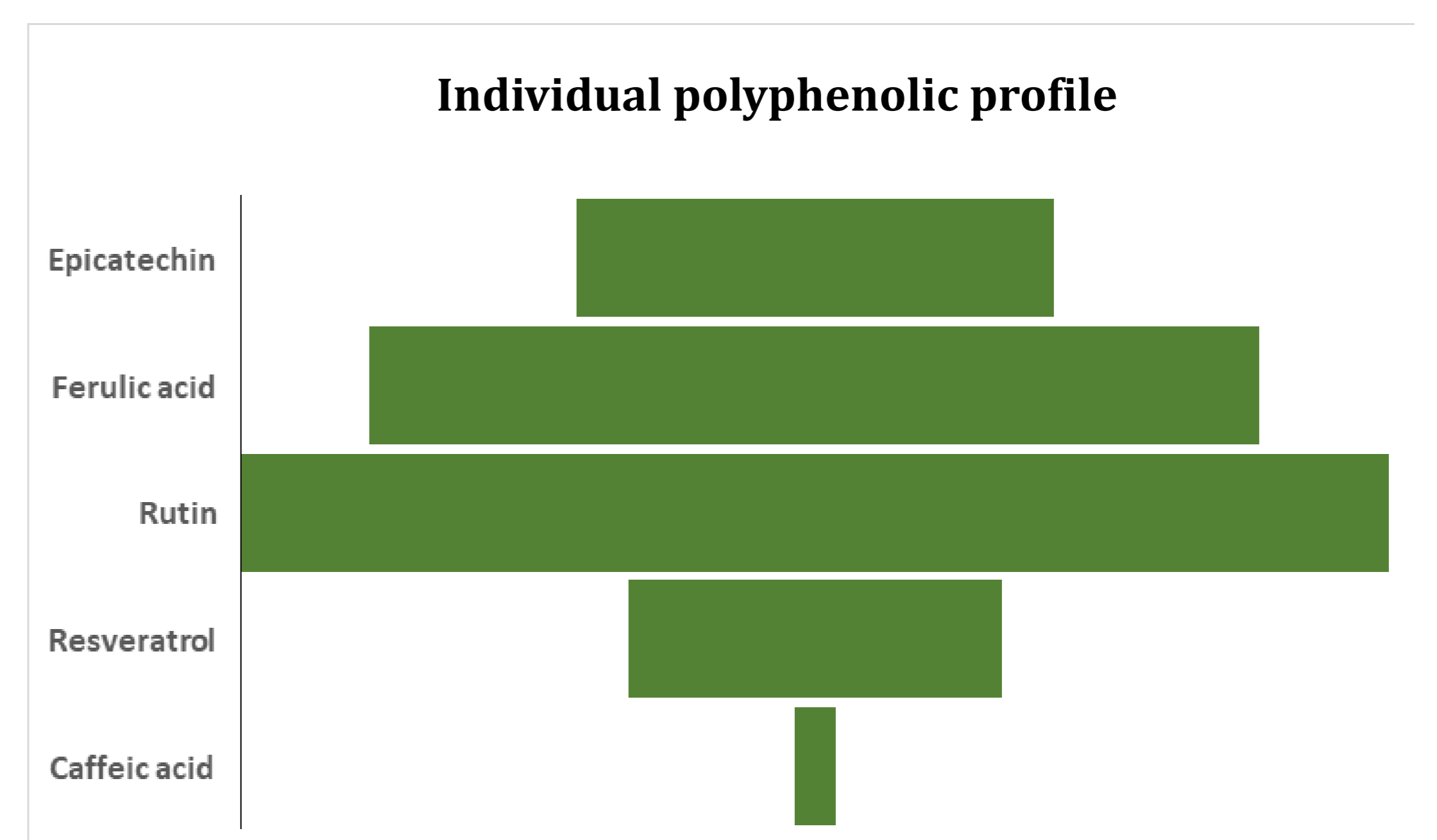
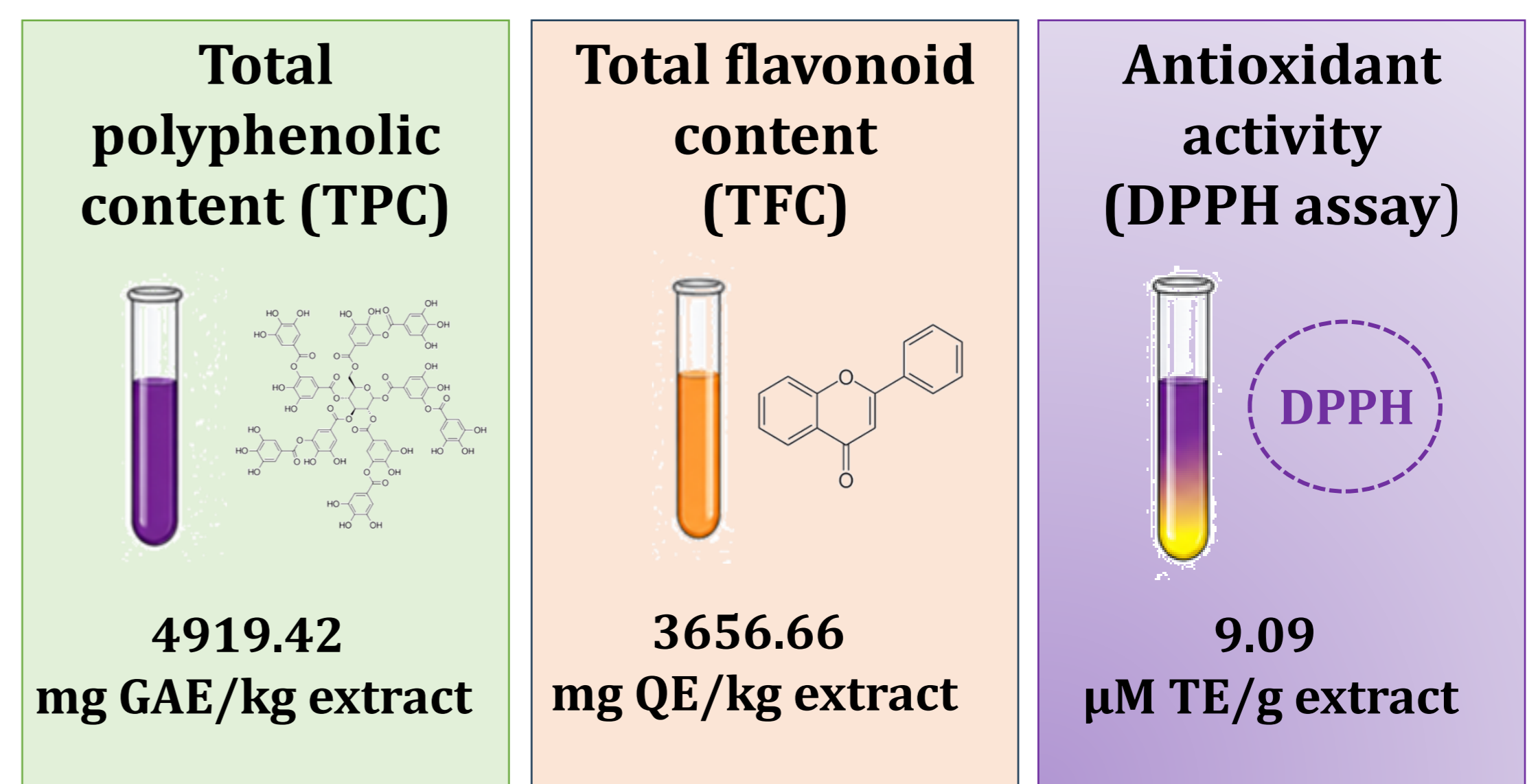


- This study aimed to evaluate the phytochemical profile and antioxidant activity of the ethanolic leaf of *Platycladus orientalis*.

Material and method

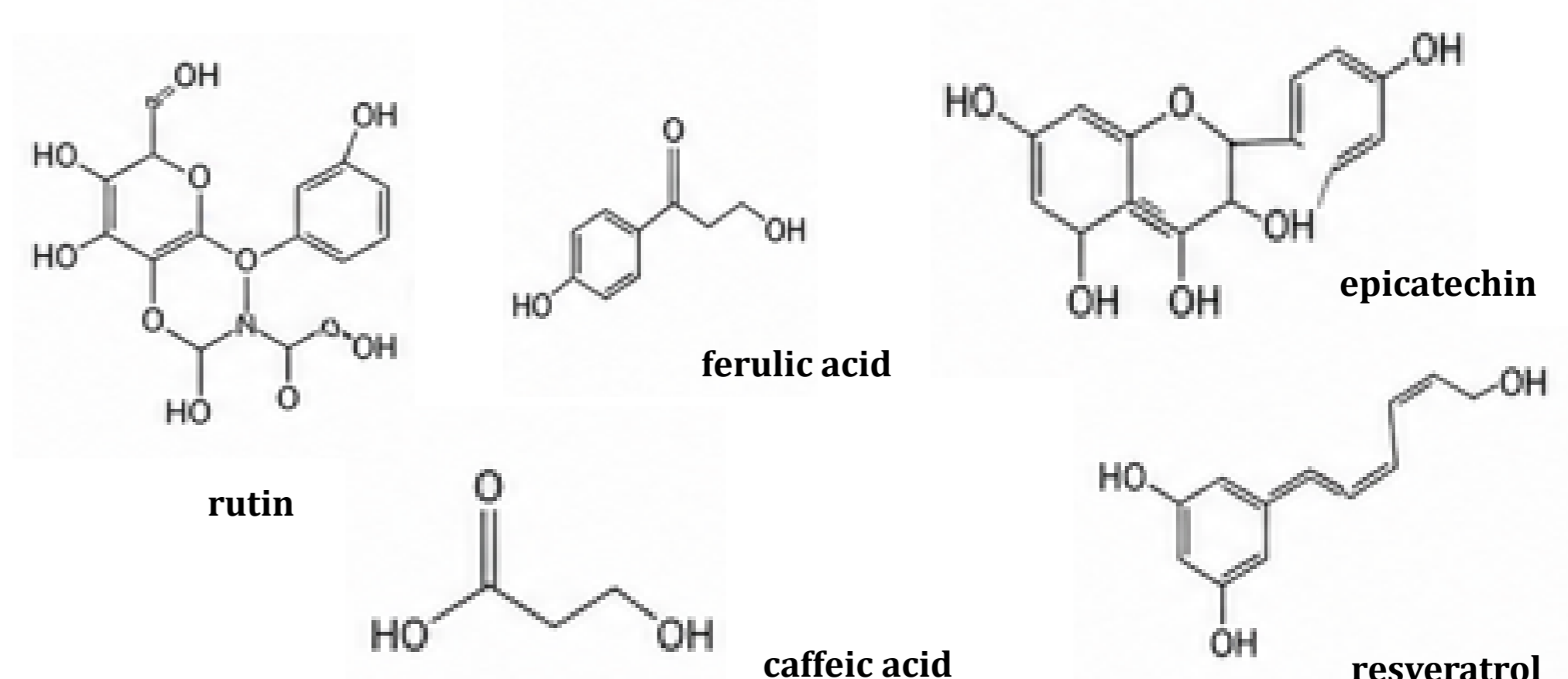


Results and discussions

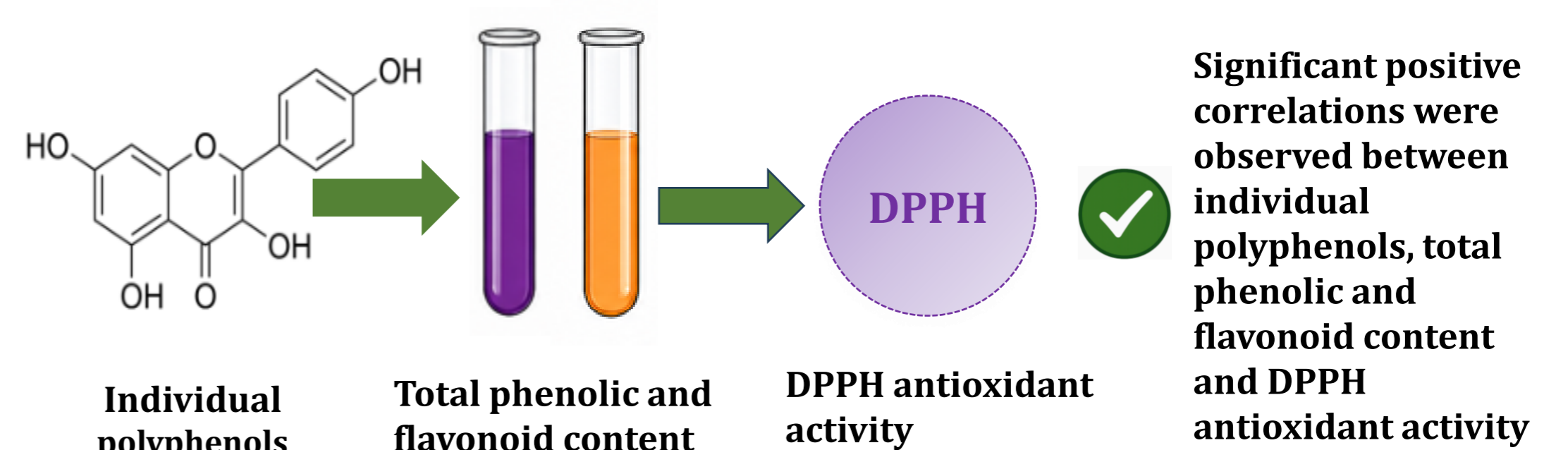


✓ Rutin was the most abundant compound, followed by ferulic acid, epicatechin, resveratrol and caffeic acid

Bioactive compounds identified (HPLC)



Correlation with antioxidant activity



Conclusion

- ✓ *Platycladus orientalis* is rich in polyphenolic and flavonoid compounds and exhibits notable antioxidant activity
- ✓ Rutin is the major compound contributing to the antioxidant potential
- ✓ The high content of bioactive compounds and their significant correlations with the antioxidant activity of *P. orientalis*, a natural source for pharmaceutical, nutraceutical, and cosmetic applications.