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High-performance size-exclusion chromatography studies on the for-mation and distribution of polar compounds in camellia seed oil during heating

Key words: Camellia seed oil, Polar compounds, High performance size exclusion chromatography, Oxidation

Research Summary

This review mainly focused on the distribution of polar compounds formed in camellia seed oil during heating.

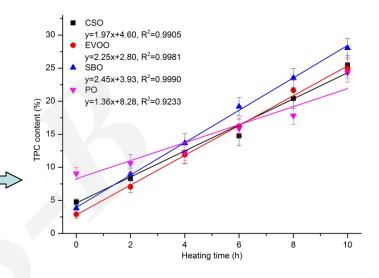


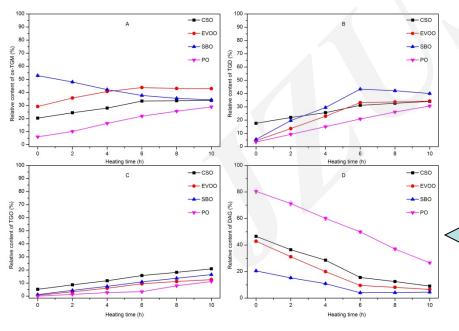


- Separation of total polar compounds
- Further analysed by HPSEC
- Changes in polar compounds distribution
- Compared with other oils

Innovation points

• **Determination** of the fact that TPC content increased linearly with heating time, and the formation rate of CSO was lower than that of EVOO and SBO.





• Further analysis of HPSEC indicated that the increase of ox-TGM and TGD was much significant than that of TGO based on the weight of TPC.

Innovation points

•Formation rate of ox-TGM and TGD was much lower in CSO than in EVOO and SBO. Only small differences were found in TGO content when considering the wide variation in the ratio of USA/SFA of the oils assayed. These results can justify the important value of camellia seed oil as an attractive and healthy cooking oil.

