PP54. THE STUDY OF THE CHEMICAL CONSTITUENTS OF KUOKEAMUTI BASED ON UHPLC-QE-MS

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Pear has been used as food and medicine for more than two thousand years. Kuokeamuti belongs to Pyrus communis L. system and mainly grows in southern Xinjiang. Kuokeamuiti has high medicinal value, which can not only improve human immunity, but also has good effect of moistening lung and relieving cough.

At present, there is a lack of research reports on Kuokeamuti, and more in-depth systematic research is urgently needed. The metabolites of Kuokeamuti were analyzed by UHPLC-QE- MS technology. It is helpful to further explore the edible and medicinal value of Kuokeamuiti as a natural medicinal and edible plant.

The extracts of the peel and seed of Kuokeamuti were selected for UHPLC-QE-MS analysis of non-targeted metabolic components of traditional Chinese medicine (Figure 1), and 18 categories and 412 components were detected (Table 1). Mainly for terpenoids, flavonoids, phenols, alkaloids, phenylpropanoids, etc (Figure 2). Among them, A total of 130 terpenoids, 96 flavonoids, 65 phenylpropanoids and 45 alkaloids were identified. 16 triterpenoids such as oleanolic acid and corosolic acid were identified. And a variety of flavonoids, phenols, phenylpropanoids, alkaloids substances. These substances have good biological activity. It provides theoretical support for the in-depth development of health care products, functional foods and related drugs.

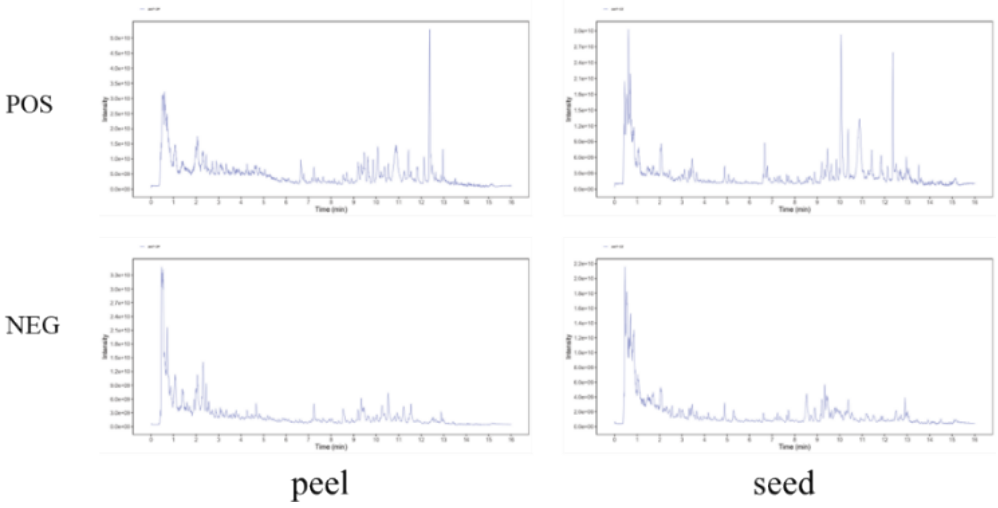

Figure 1 UPLC-QE-MS detection of positive ion and negative ion mode TIC diagram

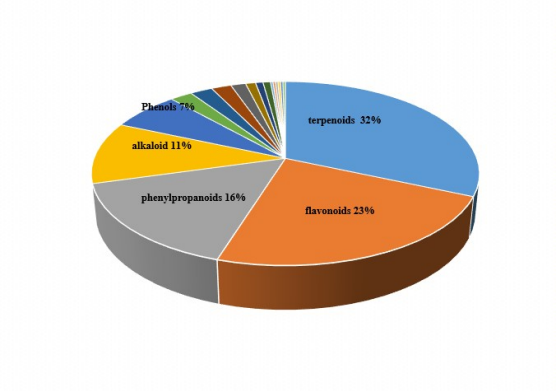

Figure 2 The proportion diagram of each component

Table 1 Component classification and quantity statistics

Class	Quantity	Class	Quantity	Class	Quantity
terpenoids	130	Aliphatic acyl	9	Xanthones	1
flavonoids	96	Amino acid derivatives	8	Prenol lipids	1
phenylpropanoids	65	Aromaticity	6	Amines	1
alkaloid	45	Fatty acids	4	Ester	1
Phenols	28	Terpenoid alkaloid	3	Carbohydrates and derivatives	1
quinones	9	Organic acids and derivatives	3	Lipids	1

Acknowledgment: This work was supported by the Key Laboratory Open Project of of Xinjiang Uygur Autonomous Region (2020D04023), Xinjiang Uygur Autonomous Region Graduate Research Innovation Project(XJ2023G269).

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