Characteristic constituents of different shochu and awamori

Various starting materials are used to prepare shochu and awamori, which represent distilled liquors, and studies are conducted to analyze their volatile constituents; however, studies comparing the characteristic volatile constituents present in different shochu and awamori samples have not been reported. Accordingly, the volatile constituents present in shochu and awamori were comprehensively analyzed.

An analytical method was developed to comprehensively analyze the volatile constituents in various commercial shochu and awamori products produced by different processes. By discriminatory analysis of the data obtained, characteristic constituents of *kome* (rice) shochu, *mugi* (barley) shochu, *imo* (sweet potato) shochu, *kokuto* (brown sugar) shochu, and awamori were identified, and different shochu and awamori samples were distinguished from their volatile constituents. From the analysis of rum, which employs the same starting material as *kokuto* (brown sugar) shochu, differences in constituents as compared with those from the use of starting material *kokuto* (brown sugar) shochu were observed; in addition, the characteristic constituents of the standard and aged awamori were clarified.

*Discriminatory analysis: A multivariate analysis method for data classification, whereby classification is conducted by comparison with reference data.

Discriminatory analysis of volatile constituents permits the distinction of different shochu and awamori.

Characteristic constituents of different shochu and awamori

・ Many starting materials are used in shochu and awamori

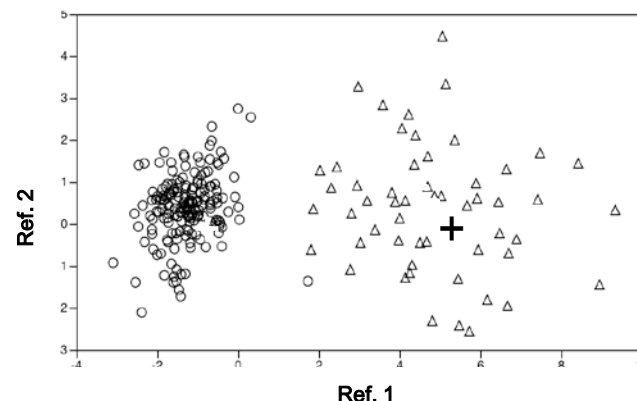→ Investigation of characteristic volatile constituents

→Discrimination between shochu and awamori

→*Kokuto* shochu and rum

→Standard and aged awamori

Qualitative and quantitative GC-MS analysis

→ Extraction of significantly different constituents by statistical analysis

→ Study of analysis and assessment by discriminatory analysis

Example of discriminatory analysis of *kokuto* shochu and other shochu
△: *kokuto* shochu   ○: other shochu

→ It was possible to distinguish the following samples

- *Kome* shochu, *mugi* shochu, *imo* shochu, *kokuto* shochu, and awamori, and other types of shochu
- *Kokuto* shochu and rum
- Standard and aged awamori