<table>
<tr><td>Results</td><td colspan="5"><Comparison of the characteristics of domestic and Chinese ginseng using advanced analytical instruments>
○ The domestic and Chinese samples were analyzed for discrimination of the geographical origin of ginseng using FT-NIRS, ED-XRF, MS type E-Nose, E-Tongue, Q-Orbitrap-HRMS. The result from the discriminant functional analysis(DFA) showed that the accuracy of geographical origin discrimination was 91.7 to 100%.
* MS type E-Nose, FT-NIR : 100%
* ED-XRF : 98.9%
* Q-Orbitrap-HRMS : 93.7%
* Electronic-tongue : 91.7%
○ It was concluded that this technique could be used as a useful method in discriminating the geographical origins between domestic and Chinese. Furthermore, it provide scientific evidence on the origin enforcement work and prevent false labeling, provide the correct information of origin to consumers at ginseng ultimately.</td></tr>
<tr><td>Expected Contribution</td><td colspan="5">○ Understanding on distribution status of ginseng seed in China and preparing the strategy for preventing of the illegal leaks and re-importation in comparative analysis the ginseng distribution between Domestic and China.
⇒ Prevention of illegal distribution of domestic seed and domestic re-imports
○ Prevention of illegal out flow of foreign ginseng it's seed in smuggling
○ Improvement of consumer confidence in domestic products through transparency of ginseng distribution market
○ Income stabilization of domestic farmers by stable supply of ginseng seeds</td></tr>
<tr><td>Keywords</td><td>ginseng</td><td>distribution status</td><td>Korean ginseng</td><td>Chinese ginseng</td><td>comparative analysis</td></tr>
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