

## 長野県松本地域で販売されたダイズ製品における 組換えダイズ混入状況の網羅的調査結果

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### Monitoring results for the RRS, RRS2 and LLS from processed soy product distributed at Matsumoto-city and its suburbs

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#### Abstract

In the past, we had reported monitoring results of Roundup Ready Soybean (RRS, 40-3-2) from soft soybean curds (kinugoshi-tofu) that were distributed at Matsumoto-city and its suburbs. However the results of other processed soybean products that were distributed there were unknown. In addition, the other genetically modified soybean, Roundup Ready 2 yield (MON89788, RRS2) and Liberty Link Soybean (A2704-12, LLS), had been detectable from Nov. 2012 in Japan. So we have monitored processed soybean products that were distributed Matsumoto-city and its suburbs from Nov. 2012 to Oct. 2014.

Sixty six samples of soy milks, 53 samples of deep-fried tofu (abura-age), 51 samples of fried tofu (nama-age), 44 samples of toasted soybean flour, 30 samples of freeze-dried tofu (kooori-tofu), 18 samples of deep-fried tofu mixed with thinly sliced vegetables (gan-modoki), 8 samples of raw soybean curds (nama-yuba) and 6 samples of dried soybean curds (yuba) were examined.

Thirty five samples of soy milks, 50 samples of deep-fried tofu, 29 samples of fried tofu, 8 samples of toasted soybean flour, 27 samples of freeze-dried tofu, 15 samples of deep-fried tofu mixed with thinly sliced vegetables and 2 samples of raw soybean curds were RRS positive. 16 samples of soybean milks, 48 samples of deep-fried tofu, 3 samples of fried tofu, 5 sample of toasted soybean flour, 11 samples of freeze-dried tofu, 11 samples of deep-fried tofu mixed with thinly sliced vegetables and 2 samples of raw soybean curds were RRS2 positive. 3 samples of soy milks, 20 samples of deep-fried tofu, 3 samples of fried tofu and 3 samples of deep-fried tofu mixed with thinly sliced vegetables were LLS positive. The differences of genetically modified organism positive rate between soybean products were observed. Differences of processed manufacture, especially processed temperature, lead the differences of degradation of DNA and had an effect on genetically modified soybean positive rate. The numbers of RRS2 and LLS positive samples were less than RRS positive samples because RRS2 and LLS were developed after RRS was developed, and the crop acreage of RRS2 and LLS were smaller than that of RRS.

Keywords: 遺伝子組換えダイズ、ダイズ加工製品、混入状況調査

genetically modified soybean, processed soybean products, monitoring results

#### I 緒言

平成 25 年度食糧需給表によると、日本の食料自給率は平成 24 年度、平成 25 年度 (概算値) とともにカロリーベースで 39% である<sup>1)</sup>。同資料における諸外国の平成 23 年のカロリーベースのそれと比較すると、アメリカ合衆国の 127%、

カナダの 258% のように自給率が高い国がある一方、日本は先進国の中で最も自給率が低い国である<sup>1)</sup>。ダイズの自給率については、醤油や味噌、豆腐のように様々な加工を受け日本人の日々の食卓にのぼっているにも関わらず、平成 25 年度の概算値で 7% と特に低く<sup>1)</sup>、国内で消費されるダイズの大半を輸入に頼っている。その輸入量のうちアメリカ合衆国が

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