

Report on the newly provided data: “Kidney Weight Data from Two 90 Day Rat Feeding Studies with Corn Hybrids that Contain Event MON 863” by Monsanto Company, St Louis, Missouri USA; 20th October 2004.

By Arpad Pusztai, 1. November 2004

This contract study has been done with two hybrids of MON 863 by the WIL Research Laboratory in the USA in response to some of the criticisms expressed by the French Commission du Genie Biomoleculaire (CGB) concerning the significant differences in kidney weights found in the original study between rats that had been fed diets containing MON 863 and its near isogenic non-GM corn line.

The report presents only some of the results of the feeding study including kidney weights, final body weights and brain weights of rat fed diets containing these two hybrid GM lines (+ the original previously obtained results with MON 863 for comparison) and the near isogenic line diet, respectively. The feeding study therefore cannot be fully evaluated. However, as it can be assumed that it was done to a similar design as the original study with the MON 863 GM corn, all criticisms made to that study should equally apply to this new study.

Thus, the large range of individual values of the various parameters and the consequently large SD values make it difficult to establish whether there were any significant differences between the different groups. Foreexample, kidney weights of male rats varied between 2.58 to 3.48 g, or 2.72 to 3.66 g, or 2.42 to 3.67 in some of the groups. Without being able to pair and follow through the appropriate test- and control animals and clearly assign individual values to individual animals whose starting weight, feed intake, and other parameters were similar and closely controlled throughout the experiment, no proper conclusion about the outcome of the feeding study is possible. Moreover, similar large differences were found in female rats and the differences in body weights or brain weights of all rats were similarly large, this study, therefore, has not advanced our understanding whether the genetic modification of corn as this has been done in the case of MON 863 or in these two GM hybrids carries any special risks for mammalian health.

As detailed in my previous main report on MON 863, this type of relatively crude and insensitive study on organ weights should only be regarded as starting point in GM food risk assessment. We need more detailed structural, pathohistological, immunological, hormonal and functional dynamic studies into organ function, right down to the cellular and subcellular level to pinpoint whether feeding mammals with GM food/feed represents any nutritional or physiological stress for the organs and whether it may jeopardize the health of the animal. There are many such methods in GM- or related fields it is, therefore, regrettable that the Monsanto scientists have not made better use of them.

Quelle: GMWatch

<http://www.gmwatch.org/p1temp.asp?pid=67&page=1>