submissions

From: Frank Rowson [redacted]
Sent: Monday, 19 November 2012 12:37 PM
To: submissions
Subject: Application A1073
Attachments: ~$plication DAS44406-final.doc

Please find attached my submission for DAS 44406-6 for which the closing date is Dec 6th., 2012. Regards, Frank Rowson, [redacted]

Application DAS44406-6 by Dow AgroSciences Australia Ltd.

The application should be denied and previous approvals for GE plants and foods derived from those plants should be cancelled and re-submitted for the following reasons.

1. FAILURE OF DUE PROCESS

a) historically, in that terms used have no legal or scientific definition, e.g. that of "equivalence", and in this application, this is not correct because, there is "reduced nutrient efficiency imposed by the presence of the Glyphosate Resistant gene" (Zobiole, Huber et al Plant and Soil 2010) and the soy has a novel EPSPS derived from Agrobacter tumificiens, so on both counts there is no "equivalence" and the application should be denied, since due process has not been followed.

b) in this application new terms have been introduced that have no definition and have been used to justify certain decisions; I refer to the term "biological significance"; where is it defined and what evidence is presented to support the term?- none, so there is no scientific support for the statements made using the term

c) In Dow's application it is stated that there were "significant increases in levels of lectins and trypsin-inhibitors" but these were of "no biological significance". These increases were in fact in the order of 35% and 25% compared to the control, very significant increases, which warrant further investigation which was not done) Due to studies done byA.R.Sapkota at the University of Maryland, it is advised that in risk assessment testing, GM should have organic as controls, not "conventional"

d) The application states in 2.2. that "It sought approval for FOOD derived from DAS44406-6…" yet in FSANZ 3.1. Risk Assessment it is stated

"Any risks related to release into the environment of GM plants used in FOOD production, or the safety of animal FEED or animals consuming FEED derived from GM plants have not been addressed in this assessment". So, how can approval be given in this case.

In the same paragraph of the assessment it is stated that "No potential public health and safety concerns have been identified". How can that be stated when, 1. they have not been investigated, 2.the lectin and trypsin-inhibitor results indicate the contrary and 3. because of the intrinsic nature of the presence of 24-D, glyphosate and glufosinate in this product, public health issues of glyphosate(and more importantly the commercial product that contains the 3 pesticides) should be part of the investigation. Again due process has not been followed; in fact EFSA Guidelines state, under Intended and Unintended Effects:-

The following elements should be considered….

2.3 e) potential toxicity and allergenicity

f) dietary intake and potential nutritional impact

g) influence of processing In this category are the effects of acrylamides produced when glyphosate(the studies done on Roundup) is heated and the major use of this product is for cooking oil.

In paragraph 3 of Toxological Assessment 3.1.4. the applicant …."should demonstrate that the intended effect(s) of the GM has no adverse effects on human and animal health-and likewise the unintended. If the applicant considers that a conclusion on safety can be reached without conducting some of the tests recommended…state the reason for not submitting and in 3.3.3.c) The applicant should ensure that the final risk characterization clearly demonstrates that". This application does none of those and therefore should be denied and all previous Gm plant and food

applications likewise be denied.

TOXICOLOGY As stated above, due process has not been followed in that unintended effects of the product have not been investigated when there are numerous studies that show Glyphosate Resistant Gm products are toxic and the use of the term “no biological significance” has been used to justify lack of toxicology assessment in this case. In my opposition to this application, I will restrict myself to one issue and that is the effects of significantly increased levels of lectins and trypsin inhibitors. We do not know the effects of GM- affected lectins but normal lectins have the following effects:-

Cause intestinal damage by their sticky nature and lining the gut villi by binding with the brush border causing nutritional deficiencies and allergic reactions. Most effects are due to this inter-reaction with gut epithelial cells which will facilitate the translocation of both dietary and gut-derived pathogenic antigens to peripheral tissues which in turn causes persistent peripheral antigenic stimulation, hence the involvement in rheumatoid arthritis amongst other things

Cause irritation and over-secretion of mucus that will therefore ..

Cause reduced absorption of nutrients including minerals

Cause changes in the intestinal microflora, especially E.coli

Cause auto-immunity, hence associated with IBS, Crohn’s disease, arthritis, fibromyalgia….etc.

When you add the effects of trypsin-inhibitors and glyphosate all of which are increased in this case there is no way can it be said that there is “no biological significance” in these findings.

As a veterinarian I am well aware of animal health problems that are already occurring in pigs and cattle, showing symptoms that can be attributed to the above and are only occurring in animals eating GM feeds and soy in particular. The effects of lectins alone can account for the bloating, changed microflora in gut (to Clostridia in Danish pigs for instance) and the upsurge in cases of botulism-(Clostridium botulinum) infertility issues due to low Manganese caused both by lectins and glyphosate. In this country we already have issues with low Magnesium, Calcium, Boron and Sodium which will be involved in the big increase in cows with broken legs and which can only get worse if we add the reduced absorption of minerals associated with GR feeds.

As a plant and soil consultant I am also aware of the increase in diseases now linked to glyphosate(40 to date and still counting) and it’s stimulation of pathogens and destruction of beneficial micro-organisms in soil.

As a human health advocate and researcher I am also aware of the huge increase in 3 conditions, namely Autism (from 1:2000 in 1990’s to 1;110 or 1:50 to-day) and the 2 pandemics of low Vitamin D and Magnesium

Autism- a recent study by Lu Wang, Sansom Institute for Health research, Univ of South Australia , enlarges on the research that shows the connection between gut microbia and the gut-brain axis in modulation of mood and how changes in gut microbial activity have potential to impact on tissues distant from the GI tract, affecting the behaviour of children with Autism spectrum disease. What do lectins do?

Dr Campbell-McBride recently showed mothers of ASD have abnormal gut flora, as do their children, they have compromised immune systems and there is a close connection between abnormal gut flora and abnormal brain development; it’s called Gut and Psychology Syndrome.

American Society of Microbiology showed an association between high levels of intestinal, muco-epithelial- associated Sutterella spp (an abnormal inhabitant) in children with gut pathology associated with Autism, over ½ the children in the study

What do lectins do?

VitaminD and Magnesium. Due to life choices many, many people are low in both but the absorption of minerals from the gut is very much involved. Even if we spent more time out in the sun we still need Magnesium to convert VitD(calcidiol) to it's active form(calcitriol) and to do this we need adequate Magnesium levels to be absorbed from the gut. Obviously this is not happening and since between them VitD and magnesium are involved in nearly 1000 enzyme systems in the body, we have problems. This connection is also involved in osteoporosis due to the reduced absorption of Calcium from the gut and the reduced levels of the other two… and what do lectins and glyphosate do? They reduce the absorption from the gut and glyphosate chelates minerals, especially Manganese, hence the infertility. And we won't go into the reduced absorption of all the other minerals like copper, zinc…etc

CONCLUSION. In view of all the readily available evidence to show the effects of GM soy and foods derived from them, it is imperative that FSANZ follow due process and decline application A1073 DAS44406-6 and revisit all previous applications of GM products