The UK Government and the GM industry:

colluding to promote GM crops and foods, undermine consumer choice and ignore environmental harm



May 2014

This briefing summarises information collected by GeneWatch UK using requests under the Freedom of Information Act and the Environmental Information Regulations (known as Fols). It demonstrates close co-operation between the GM industry and the UK Government, including a joint strategy to promote GM crops and foods in the press and media.

The documents:

- Reveal how foreign multinational GM companies are running the Government's PR strategy on GM crops by controlling how public and private money will be invested in research;
- Show that taxpayers' money is being spent on PR for the GM industry rather than delivering better food and farming:
- Suggest close co-operation with GM soya importers to pressure retailers to allow meat and dairy suppliers to use Monsanto's RoundUp Ready GM soya for animal feed and prevent consumers from accessing GM-free fed meat and dairy products;
- Highlight the extent to which the GM industry's role in Government policy is being kept hidden from the public.

Background: the ABC and "Going for Growth"

On 26th June 2012, the Agricultural Biotechnology Council (ABC)¹ joined Science Minister David Willetts and Lord Taylor (then a junior Defra minister, subsequently promoted to the Home Office) at a roundtable meeting, with an agenda based on the ABC's "Growing for Growth" report. Documents from this meeting obtained from a Freedom of Information request by GeneWatch UK revealed the GM industry's plan to promote GM crops in Britain.²

The GM companies Monsanto, Syngenta, Bayer and BASF and the ABC attended the meeting with academics from UK universities, such as Reading and Edinburgh, and research institutes, such as Rothamsted Research and the John Innes Centre and representatives of the National Farmers Union (NFU). The MP George Freeman hosted the meeting. Freeman was the Government Adviser on Life Sciences from 2011 to 2013, before being made a trade envoy in 2014. He chairs the All-Party Parliamentary Group on Science and Technology in Agriculture (funded and used by the GM industry to lobby for its interests³), launched the ABC's "Going for Growth" report in June 2012⁴, and published a 2014 report arguing that EU red tape was stifling growth in GM crops and foods.⁵

The summary of the meeting, written by the ABC, shows plans to:

- Spend more taxpayers' money on R&D for GM crops and on "education";
- Promote GM crops in developing countries;
- Remove regulatory and political barriers.

Recommended action includes Government working with industry to provide an "improved" regulatory framework and more investment, whilst academics counter criticism from anti-GM groups and build "better on the ground presence in Africa, perhaps by working with universities".

Following the release of these documents, GeneWatch UK undertook a series of Freedom of Information requests, seeking to establish the extent to which the UK Government had followed up the meeting. These requests are summarised below, together with links to the sources of the information.

Follow-up by the Department of Food and Rural Affairs (Defra)

GeneWatch UK first requested copies of all communications between the ABC and its member companies (BASF, Bayer, Dow AgroSciences, Monsanto, Pioneer/DuPont and Syngenta) on 16th April 2013. We did not receive any documents until 17th December 2013, following a series of delays that Defra has since admitted were unacceptable. The documents released contain significant gaps and we have now appealed to the Information Commissioner's Office (ICO), following an internal appeal that was only partially successful.⁶

Unusually, Defra has not posted the released documents on the Defra website. We have therefore posted the released emails⁷ and the response to our appeal.⁸

The emails released to us reveal that a telephone conference took place between the ABC and Defra's Agri-tech Strategy team on 10th June 2013 but state "no note kept". In its response to our appeal, Defra continues to claim that "no notes, minutes, action points exist" of the conversation. The phone conference took place days before, on 15th June, the Prime Minister indicated that Government policy on GM should move to a "pro-science" policy and on 20th June, Environment Secretary Owen Paterson made a major pro-GM speech at Rothamsted Research. Invitations to the ABC member companies to this event are included in the released documents. Separately, we requested a full list of attendees at the Rothamsted event, which includes only two civil society organisations (Oxfam and Which?) alongside all the major GM companies, Cargill, the Food and Drink Federation, retailers and biotech researchers.

The released documents include a blank email: "15 April 2013 – email from ABC Message on media suggestions". In its response to our appeal, Defra stated that this email was sent to us in error and therefore it did not intend to supply any further information about the content of the message or the topic of the media suggestions. On 18th April, the Government's Chief Scientific Advisor, Sir Mark Walport, told the press that GM crops were needed to feed the world, and blamed EU regulation for slowing the introduction of GM crops.¹¹

The released documents include an exchange of emails about a presentation by Syngenta at a meeting of the Advisory Committee on Releases to the Environment (ACRE) held on 21st March 2013, at which Syngenta presented proposals for weakening GM crop regulation by limiting the extent of the environmental risk assessment needed. The then ACRE Chair Prof Chris Pollock met Defra Minister Lord De Mauley prior to the next ACRE meeting on 2nd May. A short note of this meeting was released to us as the result of a separate Fol. It records that Pollock feels there will not be progress on GM until the UK has renegotiated the regulations and feels that a regulatory approach based on process is not appropriate. This means that GM crops should not be regulated just because they are GM (the GM industry's position). In August 2013, ACRE published a series of reports supporting the industry's position in favour of weaker regulation. This position has subsequently been backed by the Government's Council for Science and Technology (CST), which commissioned an additional report, backed by a letter to the Prime Minister from Chief Scientist Sir Mark Walport, arguing for changes in GM regulation.

The released documents include: "8 February 2013 – email to GM team from Monsanto Subject: Livestock industry requests to retailers

As discussed. I understand AIC are taking the lead in ongoing discussions". Despite our appeal the information referred to "as discussed" continues to be omitted, as does any follow-on to this discussion. The AIC means the Agricultural Industries Confederation which represents member companies Bunge, Cargill, Dreyfus and Archer Daniels Midland (ADM), the commodity traders which ship Monsanto's RoundUp Ready GM soya to Britain for use as animal feed. The request to retailers refers to demands for the retailers to stop requiring suppliers of meat, milk and dairy products to their stores to use non-GM animal feed, especially for poultry. On 11th and 12th April 2013, Tesco, followed by the Co-Op, Marks and Spencer and Sainsbury (except for its Taste the Difference range) caved in to pressure to stop requiring suppliers of eggs and poultry to use non-GM feed, allowing Monsanto's RoundUp Ready soya to be used instead. 18 Although retailers blamed lack of non-GM supplies, Brazilian exporters of certified non-GM soya stated that they were puzzled by the supermarkets' claims, as there was no shortage of non-GM sova to supply. 19 The Ecologist recently cited a supermarket source claiming: "It's a nightmare trying to source non GM feed. The reality is that trying to source it on the scale needed [by large retailers] is very difficult. The feed companies own the boats, the mills, they control the supply chain."20 Cargill owns the soybean crush and refinery in Seaforth Liverpool and also owns and operates the imported feed ingredient terminal at Seaforth dock.²¹

A further Fol to Defra reveals lobbying from the AIC on the issue of the industry's demand for Low Level Presence (LLP) of unapproved GM crops to be allowed in shipments.²² The documents also include Secretary of State Owen Paterson's speech to the AIC on 14th November, in which he welcomes the AIC's role in the "Feeding the Future" report (working with the AHDB, NFU and TSB) to consider future requirements for agricultural R&D for the Agri-Tech Strategy and criticises the EU's slow approvals process for GM crops. He states "Defra will want to work with the industry to establish a pragmatic coexistence regime [for GM and non-GM crops], and I'm sure that the AIC will be an important partner in taking this forward".

BIS' lists of ministerial meetings show that Science Minister David Willetts had lunch with the AIC on 15th April 2013²³, although commodity imports would seem to have little to do with science policy. Cargill also joined a July 2013 meeting with Willetts (together with the National Institute of Agricultural Botany, Pepsico, Scotland Rural College) to discuss the Government's Agri-Tech Strategy.²⁴ BIS has requested more time to answer GeneWatch's Fol about these meetings.

The Defra documents include a "14 January 2013 – email from ABC to GM team" which encloses a letter to the European Commissioner Tonio Borg (responsible for GM crops at DG SANCO), the content of which has been withheld. The ABC also includes a link to a response to a consultation by EuropaBio and BIO (the US biotech industry association) regarding trade negotiations with the US. The industry argues for "low level presence" (LLP) of unapproved GM crops to be allowed to enter the food chain. The email also includes a link to an industry document criticising the EU for delaying approvals of GM crops.

An October 2012 letter from the ABC to Defra ministers David Heath (who left Government in the October 2013 reshuffle), Lord de Mauley and Secretary of State Owen Paterson - requesting meetings – is included in the Defra documents. The letter congratulates ministers on their appointments and states that the ABC supports Defra, BIS and public research institutes and the agricultural sector "in their efforts to develop a UK strategy focused on the responsible development and application of agricultural innovations, including GM". The letter highlights that this activity follows on from "Going for Growth" and Defra's "Green Food Project" and states: "GM crops are not a 'silver bullet' for all challenges facing world agriculture. However, GM should be considered alongside a range of other tools as part of a long-term comprehensive strategy for food". One reply is included from David Heath which

states "I am very much looking forward to tackling a vast range of issues and to working with abc to achieve our aims". In response to our appeal, a further reply from Lord de Mauley offering a meeting was released but Defra stated that the meeting he offered the ABC was never actually set up. However, a meeting between the ABC and David Heath MP (then Minister of State) took place in January 2013 "To discuss role of agri-biotech including GM, in the UK and particularly food security and economic opportunities" according to Defra's ministerial meetings list which has now been published. Not only did Defra not reveal this meeting to us in response to our original request, in its response to our appeal it states: "An email origination [sic] from Assistant Private Secretary to David Heath and circulated to a number of Defra officials was withheld under regulation 12(4)(e) of the EIRs. Also withheld under the same regulation was an email circulated internally about a meeting with Agricultural Biotechnology Council – Summary and Questions".

A follow-up Fol made to Defra for communications with the ABC about the Agri-Tech strategy (also posted on the GeneWatch website²⁶) includes a 4th September 2013 email from the ABC "abc - introduction and offer of support", which makes it clear that the ABC has been involved in the Agri-tech Strategy from the start, as the follow-on from "Going for Growth", and that the author has been in regular contact with Defra and with the BIS communications team. The email asks for a date to be set soon for the second "Going for Growth" roundtable. These documents also state that two meetings were held on 17th January 2013 with the ABC, at which the Agri-Tech Strategy was discussed. This clearly includes the meeting with the then minister David Heath (information which was previously withheld, apparently on the grounds that the topic was the Agri-Tech Strategy, rather than GM). The extract from the note provided from this meeting states only "ABC thanked Defra for the support they have received from the ministerial team and commented how engaged they were with the Defra-BIS Agri-tech strategy". A second extract of a note of the meeting with officials records some (vague) interest in increased public-private partnerships involving the UK and other countries to tackle "global challenges" (whilst making it clear that a single company would not bear all the risk). The note also states that the ABC was extremely interested in the Agri-Tech Strategy's Leadership Council and made suggestions for its role and membership. Other emails, copied to BIS, discuss co-operation on media messages for the Strategy (discussed further below).

An additional Fol request, seeking contacts between Defra and the Science Media Centre (SMC) (also posted to the GeneWatch website²⁷) shows that Defra passed contacts to the SMC on 19th June 2013 to provide endorsement for Paterson's speech on 20th June.

Our original FoI request to Defra did not include any meetings in 2014. However, a meeting between Secretary of State Owen Paterson and BASF was reported in the Times in January 2014.²⁸ In response to a further FoI, Defra provided the letter from the Secretary of State requesting a meeting with BASF but withheld any further information.²⁹ GeneWatch UK is appealing this decision.

Owen Paterson also accepted an invitation to attend industry body EuropaBio's "Growing Voices" event in Brussels on 22nd January 2014³⁰, but was unable to attend due to ill health.

BIS and the Agri-Tech Strategy

The Government's Agri-Tech Strategy was launched by Science Minister David Willetts on 22nd July 2013, with support from Defra and the Department for International Development (Dfid).³¹ The Strategy is expected to set the agenda for both public and private R&D investments in this area in future, including via public-private partnerships.^{32,33} The Government will invest £70 million through the Technology Strategy Board (TSB) and the Biotechnology and Biological Sciences Research Council (BBSRC) and Dfid to establish an

Agri-Tech Catalyst and £90 million over five years to establish a small number of Centres for Agricultural Innovation. A Leadership Council has been set up to oversee the Strategy, with members including Cargill and Syngenta.

GeneWatch UK submitted an Fol to BIS for its communications with the ABC regarding the Agri-tech Strategy. This Fol response appears to have been omitted from the BIS site so we have posted it on the GeneWatch one.³⁴

The documents released by BIS include the following:

- 1. Extensive emails copied to BIS, Defra, Dfid and the research funders the BBSRC and TSB, which show that the ABC is effectively acting as an outsourced Government department.
- 2. Emails and a 19th June 2013 meeting run by PR company Blue Rubicon, which show how media messages for the Agri-Tech Strategy were developed jointly with the industry, with the ABC providing extra information and red flags, sharing press releases, highlighting "potential pitfalls" and highlighting in red "journalists who have been negative towards biotech".
- 3. Emails from the ABC in October 2013 asking for a second "Going for Growth" roundtable, leading to a meeting with BIS' Deputy Director on 18th December 2013. BIS states "There was no agenda, papers, notes etc.".

Two members of the ABC attended the Blue Rubicon meeting; other industry representatives were from the Food and Drink Federation (FDF) and Pepsico. The NFU, the research funders ADHB, BBSRC and TSB, and the Met Office also attended alongside civil servants from three departments (BIS, Defra and Dfid).

The evidence of a jointly developed strategy is strengthened by BIS' published list of ministerial meetings which shows that Science Minister David Willetts had four meetings with Syngenta in summer 2013 (one in May, two in July and one in September) to discuss the Agri-Tech Strategy and science and research. The following meetings are listed 35,36:

- 1. In May 2013: with G's Fresh Group, Agriculture and Horticulture Development Board, National Institute of Agricultural Botany, Scotland's Rural College, Sainsbury's, Pepsico, Syngenta: To discuss science and research;
- 2. In July 2013: with G's Group, Pepsico, Syngenta: To discuss Agri-Tech;
- 3. In July 2013: with Syngenta: To discuss science and research;
- 4. In September 2013: with Syngenta: To discuss science and research.

BIS informed GeneWatch UK that its Fol about these meetings exceeded the cost limit. We have resubmitted a narrower request.

The Cabinet Office and Trans-Atlantic Trade

In September 2013, the Minister without Portfolio, The Rt Hon Kenneth Clarke MP met with the ABC and other bodies including the Agriculture and Horticulture Development Board (AHDB), the National Farmers Union (NFU) and other major food industry representatives to discuss the Transatlantic Trade and Investment Partnership (TTIP).³⁷

The GM industry in the USA sees the TTIP negotiations as a major opportunity to weaken GM regulations and increase exports of GM crops and foods to the European Union (EU). In addition, a controversial proposed Investor-State Dispute Resolution mechanism could allow the GM industry to take European governments to court if they seek to block imports or cultivation of GM. 39

BIS has informed GeneWatch UK that our FoI request about this meeting and any further communications with the ABC exceeded the cost limit. We have resubmitted a narrower request.

Conclusions

Documents obtained using FoI requests reveal the extent of the Government's collusion with the GM industry, as well as its attempts to hide this information by delaying responses and withholding documents.

The industry's PR strategy is to focus on future claims of benefits from GM crops that are not yet commercialised and are unlikely to ever be delivered, using non-industry scientists to promote these claims. This avoids discussion of the leading crops on the market, which are genetically engineered to be tolerant to company's own-brand herbicides, such as Monsanto's RoundUp Ready soya and maize, genetically engineered to be resistant to the weedkiller RoundUp. Herbicide tolerant GM crops raise major environmental concerns because blanket spraying with weedkiller destroys habitats for wildlife such as birds and butterflies. 40,41,42 Resistant "superweeds" also develop which cause major problems for farmers, significantly increase the use of herbicides and require more toxic weedkillers.

The documents show the Government and the GM industry collaborated on media messages and targeting (or avoiding critical) journalists, in an attempt to portray GM crops in a positive light and ignore these problems. They also highlight how supposedly independent scientists became a key tool in the industry's PR strategy, promoting the industry's claims that GM crops are necessary to feed the world and that GM regulation should be weakened, in return for promises of R&D investment (which has not actually materialised). The Government's approach to developing its Agri-Tech Strategy means that scientists are inevitably compromised by the need to promote the GM industry's messages in order to get funding. Thus, evidence that non-GM farming in Europe has outperformed GM farming in the USA simply gets ignored.⁴⁴

In reality, herbicide-tolerant GM crops are the only GM crops in the pipeline for commercial growing in the UK (the other main commercial trait, Bt crops, i.e. pest-resistant crops, are not suitable for growing here). These crops are on the market for two reasons: the first is that selling weedkillers with the patented GM seeds is how the GM companies make money; the second is that most other GM crops trials have ended in failure, because complex traits such as drought-tolerance and blight-resistance are easier to deliver with non-GM approaches. The next-generation of GM crops, developed to deal with widespread 'superweeds' in countries where RoundUp Ready GM crops are grown, are tolerant to more toxic weedkillers, such as 2,4-D.⁴⁵

At the EU's March 2014 Environment Council meeting, Environment Secretary Owen Paterson supported a proposal which would fast-track GM crops for commercial cultivation in pro-GM countries, whilst allowing anti-GM countries to opt out. If this proposal is endorsed by other EU countries at the next Environment Council meeting on 12th June, and later backed by the European Parliament, Monsanto's or Syngenta's GM RoundUp Ready maize could be planted in England as early as Spring 2015. It is difficult to conclude this is anything other than a political deal, offered in the vague hope of a return in R&D investment from Monsanto or Syngenta as an anticipated payment for colluding in the industry's PR. Paterson was appointed Secretary of State in September 2012 and has reversed the UK Government's position on the opt out (with was previously opposed as damaging to the single market). Presumably he hopes the offer of planting RoundUp Ready GM crops in England will lead to GM industry investment in UK scientific institutes. As well as harming

the environment, growing RoundUp Ready GM crops will add to conventional and organic farmers' costs, because of the need for segregation and the risk of GM contamination.

The Government has also encouraged its supposedly independent advisors, ACRE, to develop proposals to weaken GM crop regulation, along lines proposed by the GM company Syngenta.

At the same time, important questions must be asked about Government discussions with commodities importers such as Cargill whilst retailers were under pressure to limit consumer choice to buy meat and dairy products fed on non-GM feed. Restricting access to non-GMfed meat and dairy products directly contradicts the Conservative Party's 2010 manifesto commitment to "ensure that consumers have the right to choose non-GM foods through clear labelling"47, undermines strong consumer demand for non-GM feed and for GM-fed meat and dairy products to be labelled⁴⁸, and causes environmental harm such as the devastating loss of Monarch butterflies in the USA.⁴⁹ The main beneficiary of retailers' backtracking on commitments to use non-GM feed supplies is Monsanto, because most imported GM feed is Monsanto's RoundUp Ready GM soya.

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References

¹http://www.abcinformation.org/

² GeneWatch UK and GM Freeze Press Release: Monsanto meets ministers to push return of GM crops to Britain 25th October 2012.

http://www.genewatch.org/article.shtml?als[cid]=492860&als[itemid]=571449

³ GM industry fund parliamentary group to promote return of GM crops to Britain. GeneWatch UK Press Release. 27th November 2012.

http://www.genewatch.org/article.shtml?als[cid]=492860&als[itemid]=571543

ABC Going for Growth Report: Paving the Way for UK Agriculture to Lead an Economic Recovery. George Freeman. 26th June 2012. http://blog.georgefreeman.co.uk/content/abc-going-growth-reportpaving-way-uk-agriculture-lead-economic-recovery
⁵ EU Impact on Life Sciences. Fresh Start Group. 2014.

http://www.eufreshstart.org/downloads/lifesciences.pdf

⁶ Defra battles to keep public in the dark over GM industry influence on policy and media. GeneWatch UK Press Release. 15th April 2014.

http://www.genewatch.org/article.shtml?als[cid]=492860&als[itemid]=574455

RFI 5589 - CONTACTS WITH THE AGRICULTURAL BIOTECHNOLOGY COUNCIL AND ITS MEMBER COMPANIES 1/9/12 to 26/6/13.

http://www.genewatch.org/uploads/f03c6d66a9b354535738483c1c3d49e4/20130717 RFI5589 co ntacts with ABC member companies attachments doc 1.pdf ⁸ RFI 5439/5589: Defra response to request for internal review on:

http://www.genewatch.org//uploads/f03c6d66a9b354535738483c1c3d49e4/Helen Wallace 5589 IR_reply.pdf

David Cameron: 'It is time to look again at GM food'. The Telegraph. 14th June 2013. http://www.telegraph.co.uk/news/worldnews/g8/10121599/David-Cameron-It-is-time-to-look-again-at-

GM-food.html

To Owen Delivers a Speech on the Benefits of Genetically Modified Crops. Thursday 20 June 2013. http://www.owenpaterson.org/news/owen-delivers-speech-benefits-genetically-modified-crops

11 Genetically modified crops needed to 'feed the world,' says Government's chief scientific advisor Mark Walport. The Independent. 18th April 2013.

http://www.independent.co.uk/news/science/genetically-modified-crops-needed-to-feed-the-worldsays-governments-chief-scientific-advisor-mark-walport-8578952.html

12 Ecological risk assessment and decision - making: making effective use of data to reduce

uncertainty. Alan Raybould, Environmental Safety, Syngenta. Presentation at: Towards a more effective approach to environmental risk assessment under current GMO legislation - ACRE evidence-gathering meeting March 21st, 2013.

http://webarchive.nationalarchives.gov.uk/20130702104035/http://www.defra.gov.uk/acre/files/A-Raybould-presentation.pdf

¹³ Defra replied to GeneWatch UK on 10th June 2013:

"The meeting was a short one prior to the main ACRE meeting on 2 May to update the minister on ACRE's current activities. It was attended by an official from Lord de Mauley's office and one from the GM Team in Defra, in addition to Lord de Mauley and Chris Pollock. There was no formal agenda or minutes but we do have a note of the main points raised at the meeting. This is attached". The attachment is on:

http://www.genewatch.org//uploads/f03c6d66a9b354535738483c1c3d49e4/20130520 RFI5506 final reply attachment.doc

14 Towards a more effective approach to environmental risk assessment of GM crops under current

EU legislation. ACRE. 27th August 2013. https://www.gov.uk/government/publications/geneticallymodified-organisms-improving-risk-assessments

15 Why a modern understanding of genomes demonstrates the need for a new regulatory system for

GMOs. 27th August 2013. https://www.gov.uk/government/publications/genetically-modifiedorganisms-the-case-for-new-regulations

Towards an evidence-based regulatory system for GMOs. ACRE. 27th August 2013. https://www.gov.uk/government/publications/genetically-modified-organisms-review-of-current-euregulations

Scientists' hidden links to the GM food giants: Disturbing truth behind official report that said UK should forge on with Frankenfoods. Daily Mail. 14th March 2014.

http://www.dailymail.co.uk/news/article-2581387/Scientists-hidden-links-GM-food-giants-Disturbingtruth-official-report-said-UK-forge-Frankenfoods.html

18 Sainsbury's, M&S and the Co-op follow Tesco's lead on GM feed. The Grocer. 12th April 2013.

http://www.thegrocer.co.uk/fmcg/fresh/sainsburys-ms-and-the-co-op-follow-tescos-lead-on-gmfeed/238400.article?redirCanon=1#.UWgqvsoz96M

19 Brazilian exporters 'puzzled' by UK supermarket GM claims. Farming Online. 16th April 2013.

http://www.farming.co.uk/news/article/8244

Deformities, sickness and livestock deaths: the real cost of GM animal feed? The Ecologist. 28th November 2013.

http://www.theecologist.org/News/news_analysis/2176082/deformities_sickness_and_livestock_death s the real cost of gm animal feed.html

http://www.cargill.co.uk/en/locations/liverpool/

RFI6169 on: https://www.gov.uk/government/publications/contact-between-defra-and-theagricultural-industries-confederation
²³ BIS Apr-Jun 2013 hospitality:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/246366/april-june-2013-disclosure-ministerial-hospitality.csv/preview ²⁴ BIS Ministerial meetings: July-Sept 2013:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/268136/ministers-giftshospitality-july-september-2013.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/212312/defra-mintransparency-1213-q4.pdf

²⁶ RFI6395: Communications between Defra and the Agricultural Biotechnology Council (ABC) on the Agri-Tech Strategy since 1st January 2012.

http://www.genewatch.org/uploads/f03c6d66a9b354535738483c1c3d49e4/FINALDOC130314_13032 014164339.pdf

RFI5591 - CONTACTS & MEETINGS WITH THE SCIENCE MEDIA CENTRE.

http://www.genewatch.org//uploads/f03c6d66a9b354535738483c1c3d49e4/20130708 RFI5591 attac hments to reply Science Media Centre.pdf

Britain woos German GM crop developer. The Sunday Times. 19th January 2014. http://www.thesundaytimes.co.uk/sto/business/Industry/article1364597.ece

²⁹ RFI6297 on: https://www.gov.uk/government/publications/details-of-meeting-with-basf-in-january-

³⁰ RFI6170 on: https://www.gov.uk/government/publications/the-growing-voices-event

³¹ £160 million technology boost for UK agricultural industries. Press Release. BIS and Defra. 22nd July 2013. https://www.gov.uk/government/news/160-million-technology-boost-for-uk-agricultural-

A UK Strategy for Agricultural Technologies. HM Government. July 2013.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/227259/9643-BIS-UK Agri Tech Strategy Accessible.pdf

33 GeneWatch UK response to the EFRA Committee consultation on Food Security. December 2013. http://www.genewatch.org/uploads/f03c6d66a9b354535738483c1c3d49e4/EFRAFoodSecurity Gene Watch fin.pdf

BIS Fol 14/0283. Communications and meetings re the Agri-Tech Strategy since 1st January 2012. Released 14th March 2014.

http://www.genewatch.org/uploads/f03c6d66a9b354535738483c1c3d49e4/Fol_release_documents.p df
35 BIS Ministerial meetings: July-Sept 2013:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/268136/ministers-giftshospitality-july-september-2013.pdf

BIS ministerial meetings April – June 2013:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/292603/april-june-2013-disclosure-ministerial-meetings.csv/preview
37 Cabinet Office Ministerial Meetings July-Sept 2013:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/273401/comeetingsjuls ept13 2 .csv/preview

American agriculture: Go Europe, EurActiv, 21st October 2013.

http://www.euractiv.com/general/american-agriculture-go-europe-analysis-

531211#.UwTGdr3mo2o.twitter

39 Brussels wants to hear more on TTIP investor-state dispute clause. EurActiv. 22nd January 2014. http://www.euractiv.com/trade/brussels-wants-hear-ttip-investo-news-532919

40 Squire GR, Brooks DR, Bohan DA, et al. (2003) On the rationale and interpretation of the Farm

Scale Evaluations of genetically modified herbicide-tolerant crops. Philos Trans R Soc Lond B Biol

Sci. 358(1439):1779–1799.

All Pleasants JM, Oberhauser KS (2013) Milkweed loss in agricultural fields because of herbicide use: effect on the monarch butterfly population. Insect Conservation and Diversity 6(2):135-144.

⁴² The Year the Monarch Didn't Appear. New York Times. 22nd November 2013. http://www.nytimes.com/2013/11/24/sunday-review/the-year-the-monarch-didnt-

appear.html?emc=edit tnt 20131122&tntemail0=y& r=4&

43 Mortensen DA, Egan JF, Maxwell BD, Ryan MR, Smith RG (2012) Navigating a Critical Juncture for Sustainable Weed Management. *BioScience*, **62**(1):75–84.

Heinemann et al. (2013) Sustainability and innovation in staple crop production in the US Midwest. International Journal of Agricultural Sustainability. Published online: 14 Jun 2013.

http://www.tandfonline.com/doi/full/10.1080/14735903.2013.806408#.Ub9AU5zXryU

Stop risky herbicide 2,4-D. Testbiotech, GeneWatch UK and the Pesticide Action Network (PAN) Press Release. 27th January 2014.

http://www.genewatch.org/article.shtml?als[cid]=568237&als[itemid]=574132

⁴⁶ Environment groups condemn Paterson's plans to plant RoundUp Ready GM crops in England. GeneWatch UK, Greenpeace UK, Friends of the Earth, GM Freeze, Soil Association. Joint press release. 10th March 2014.

http://www.genewatch.org/article.shtml?als[cid]=568547&als[itemid]=574352

Invitation to Join the Government of Britain. Conservative Manifesto 2010. http://conservativehome.blogs.com/files/conservative-manifesto-2010.pdf

48 GM food should be labelled by supermarkets – FSA. The Telegraph. 9th January 2013.

http://www.telegraph.co.uk/earth/earthnews/9790430/GM-food-should-be-labelled-by-supermarkets-

⁴⁹ Monarch butterflies drop, migration may disappear. Associated Press. 29th January 2014. http://www.theday.com/article/20140129/NWS14/140129660/1047#.Uukyvz9IXZU.twitter