



## Press release

### **Monsanto caught redhanded violating rules! - Civil society and farmer unions demand action against the company and an immediate Ban of GM field trials in India**

**July 4<sup>th</sup> 2011, Bangalore:** After Monsanto was caught red-handed violating biosafety rules in the case of GM corn by Greenpeace and a local TV channel, leading farmers union in the state, Karnataka Rajya Raitha Sangha (KRRS) and civil society organisations demanded an immediate ban on all open field experiments of Genetically Modified (GM) crops in the country.

Monsanto, the American multinational seed giant had taken up seed production for two transgenic corn hybrids containing stacked cry2Ab2, cry1A.105 (Event MON 89034) & cp4epsps (Event NK603) genes<sup>1</sup> on the field of one Mr. Amrit Gowda in the village of Banihatti P.A in Sindagi Taluk, Bijapur, Karnataka. It has been found that the company has flouted every required norm or procedure to ensure biosafety from such GM products in experimental & research stages. What is most worrying is the fact that the biosafety assessment of this GM corn has not been completed while such open cultivation leading to seed and transgene leakage have been permitted.

The following are the major violations that Greenpeace has documented in this case:

- a. GM corn cobs with viable seeds have been lying at the field, which was harvested almost a month ago (June 1, 2011) leading to concerns about seeds from the plot leaking/dispersing/spreading to nearby areas and volunteer plants coming up in the upcoming season. Thus the rule to destroy all residues properly after the GM crop has been harvested have been violated.
- b. The existing guidelines [2008] for field experiments of GM crops in confined conditions also says that all crops, including the refuge, has to be destroyed post the harvest. In this case the farmer has been allowed to keep the refuge, which could already be contaminated with the transgenes from the GM corn. This raises serious concerns about the health to the farmer and his family who may have consumed the corn and also about the possibility of these contaminated seeds spreading further. As a matter of fact, the refuge was left over by the company for the farmer to use as feed for his cattle.
- c. The field has been left open with residues of GM corn lying there for more than a month and cattle have been found grazing in the trial plot. Only small patches of the cultivated field have been burned down, and only this has been documented/photographed by the company at the time of harvest [probably just to satisfy the statutes]. There has been no contact made by the company thereafter.
- d. Most alarmingly there was neither a fence around the trial plot while the trial was happening nor any sign board indicating that the field had a regulated, untested GM corn in an experimental stage

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<sup>1</sup> <http://www.moef.nic.in/divisions/csurv/geac/decision-nov-104.pdf>

was being cultivated.

e. Bijapur does not have a functional District Level Committee (DLC) in place; neither the Deputy Commissioner, Bijapur nor the Joint Director of Agriculture knew about the existence of such a body or of any cultivation of GM crops happening in the district. According to existing regulatory regime, a DLC is a mandatory body in any place where field trials are permitted/in progress.

f. Monsanto has executed a seasonal agreement with the farmer's relative. This is in contravention to the guidelines set forth by GEAC for the usage of farmers fields, which says that the applicant has to have at least a 3-year lease agreement with the farmer whose plot is being used. This is also to ensure that proper post-harvest monitoring of the plot can happen.

g. There was no information given to the farmer on what precautionary measures need to be taken to ensure biosafety norms are adhered to before or after the trial.

h. Monsanto was permitted to take up trials in Rabi 2010-2011 or Kharif 2011 but this plot was neither a rabi crop nor a kharif crop but was sown as a summer crop.

“While these are the violations that could be documented almost after a month after the harvest of the GM corn, one shudders at the thought of the numerous possibilities of contamination that would have happened while the GM crop was in the field”. said Shivani Shah, Sustainable Agriculture Campaigner, Greenpeace India. She further stated that “What we saw on ground proves once again that the citizens of this country cannot trust the regulatory body in this country to ensure that our health, farming and environment from the risks of GM crops”.

Greenpeace is sending the video documentation of the field and other relevant evidences collected along with this letter to the Minister for Environment & Forests, Sri Jairam Ramesh and the regulators, which substantiates our concerns. The same is being sent to the Chief Minister of Karnataka too.

“Karnataka is fast becoming a hotbed of such field trials. It is high time that the state government comes forward, like Madhya Pradesh has done for instance, to save the citizens of this state” said Krishnaprasad of Sahaja Samrudha. He demanded Karnataka state government follow the path of other states governments like Bihar and Madhya Pradesh which have written to the Government of India informing that they will disallow such trials in their respective states.

Kodihalli Chandrasekhar, President, KRRS said, “Field trials and seed production of this GM corn has also been permitted for this Kharif. The Karnataka farmers are being made scapegoats by multinational seed corporations like Monsanto, whose past is checkered with numerous cases of violations of farmers’ rights over their seeds. If our elected governments remain silent spectators to such onslaughts of seed corporations whose eye is on taking control of the multi billion seed market in the country, the farmers of the state will have to resort to direct action to protect their seeds, farms and livelihoods. The state government has to come forward to ban such trials in Karnataka and to immediately stop Monsanto from operating in the state”.

Speaking at the press conference, Kavitha Kuruganti, Convenor, Alliance for Sustainable and Holistic Agriculture [ASHA] said, “It is clear that our regulators have no control whatsoever on the open air release of GM seeds even as they sit in Delhi and clear dozens of applications for such

environmental release. Field trials today pose a grave threat and we have highlighted the failures of the regulators time and again, including in a presentation we made to the GEAC on 11<sup>th</sup> May this year. It is also clear that regulators are allowing the industry and conflicting interests to prevail in their decision-making forgetting that they have been given a mandate of protecting our environment, health and Nature from the risks of modern biotechnology, Liability has to be fixed on Monsanto for the grave violations found here; further, the government should fix liability on the regulators for such lapses. It is time that environmental releases including for open air trials and seed production be stopped immediately”.

In the light of this new evidence, speakers demanded that the Union Minister for Environment and Forests under whose Ministry GEAC operates to

- Blacklist Monsanto and ensure that liability measures under EPA1986 are invoked against the company. The regulators liable for such lapses.
- Cordon off the region around this GM seed production site immediately and a contamination study of the region should be ordered and a report brought out immediately about the extent of contamination if any.
- Given the lack of monitoring mechanisms in place, they also demanded that no more field trials be permitted in India which is critical to keep our food and environment safe from potential dangers of Genetically Modified Organisms.

Notes to the editor:

\* A copy of the letter to GEAC can be accessed at

<http://www.greenpeace.org/india/Global/india/docs/Letter%20to%20GEAC-%20Monsanto%20Bijapur.pdf>

For more information, contact:

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**Kodihalli Chandrashekhar** - President, Karnataka Rajya Raitha Sangha  
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**Kavitha Kuruganti**-Convenor, Alliance for Sustainable and Holistic Agriculture (ASHA]: 09393001550, email: kavitha\_kuruganti@yahoo.com

**Krishna Prasad** - Convener, Coalition for GM Free Karnataka  
Mobile: 09880862058, email:sahajasamrudha@gmail.com

## Annexure 1B:

To:  
Shri M F Farooqui,  
Chairperson,  
Genetic Engineering Appraisal Committee,  
Ministry of Environment & Forests,  
Paryavaran Bhawan, CGO Complex,  
Lodhi Road, New Delhi 3.

Dear Shri Farooqui,

### **Re: Demand to immediately stop all GM field trials in the wake of blatant violations of Biosafety norms at GM corn experimental seed production site by Monsanto**

This is to share with you the blatant violations of legal and Biosafety Norms by Monsanto at their Seed Production location for two transgenic corn hybrids containing stacked cry2Ab2, cry1A.105 (Event MON 89034) & cp4epsps (Event NK603) genes<sup>2</sup>. These violations have been documented by Greenpeace along with various media agencies in Karnataka on 2/07/2011.

At Bannihatti P.A. Village of Sindagi Taluk, Bijapur District, Karnataka where Monsanto is doing seed production of its transgenic corn, it has been found that company has flouted every required norm or procedure to ensure biosafety from regulated field experiments. What is most worrying is the fact that the biosafety assessment of GM corn has not been completed while such open experiments leading to seed and transgene leakage have been permitted.

The following are the major violations that Greenpeace has documented:

- a. GM corn cobs with viable seeds have been lying at the field, which was harvested almost a month ago (June 1, 2011) leading to concerns about seeds from the plot spreading to nearby areas and volunteer plants coming up in the upcoming season. Thus the rule to destroy all residues properly after the GM crop has been harvested has been violated.
- b. The existing guidelines [2008] for field experiments of GM crops in confined conditions also says that all crops, including the refuge, has to be destroyed post the harvest. In this case the farmer has been allowed to keep the refuge, which could already be contaminated with the transgenes from the GM corn. This raises serious concerns about the health to the farmer and his family who may have consumed the corn and also about the possibility of these contaminated seeds spreading further. As a matter of fact, the refuge was left over by the company for the farmer to use as feed for his cattle.
- c. The field has been left open with residues of GM maize lying there for more than a month and cattle have been found grazing in the trial plot. Only small patches of the cultivated field have been burned down, and only this has been documented/photographed by the company at the time of harvest [probably just to satisfy the statutes]. There has been no contact made by the company thereafter.
- d. Most alarmingly there was neither a fence around the trial plot while the trial was happening nor any sign board indicating that the field had a regulated GM corn undergoing trial.
- e. Bijapur does not have a functional District Level Committee (DLC) in place neither the Deputy

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<sup>2</sup> <http://www.moef.nic.in/divisions/csurv/geac/decision-nov-104.pdf>

Commissioner, Bijapur nor the Joint Director of Agriculture knew about the existence of such a body or of any field trial of GM crops happening in the district. According to existing regulatory regime, a DLC is a mandatory body in any place where field trials are permitted/in progress.

f. Monsanto has executed a seasonal agreement with the farmer's relative . This is in contravention to the guidelines set forth by GEAC for the usage of farmers fields for confined field trials ,which says that the applicant has to have a 3 year lease agreement with the farmer whose plot is being used. This is also to ensure that proper post harvest monitoring of the plot can happen.

g. There was no information given to the farmer on what precautionary measures need to be taken to ensure biosafety norms are adhered to before or after the trial.

While these are the violations we could document almost after a month after the harvest of the GM corn, one shudders at the thought of the infinite instances of contamination that would have happened while the GM crop was on the field. We are sending the video documentation of the field and other relevant evidences collected along with this letter which substantiates our concerns. We were also astonished when, Dr. Ranjini Warriar, the member secretary GEAC, told us over phone that GEAC still does not have any guidelines specifically set for experimental seed production.

Civil society across the country had been highlighting the various problems with GM crops and the haphazard manner in which their open releases in name of field trials are happening in our country. We had communicated such grave concerns many times in the past to GEAC. In fact a compilation of the concerns about GM crop field trial was presented to you by the Greenpeace member of the delegation from GM free India coalition in a GEAC meeting on the 11<sup>th</sup> of May this year.

It is unfortunate that GEAC lacks seriousness when it comes to such grave violations of its own rules and regulations by reckless seed companies. This we fear would endanger the food, farming and environment in our country.

In the light of all the new evidences, we urge you to take immediate action against Monsanto India Ltd, whose reckless actions in conducting an experimental seed plot has put on risk the food supply in our country. We demand that the company be blacklisted and liability measures under EPA 1986 be evoked .

Further to ensure the health and environment safety, the region around this trial site should immediately be cordoned off and a contamination study of the region should be ordered.

Given the lack of monitoring mechanism in place we also demand that no more field trials be permitted in India. This is critical to keep our food and environment safe from potentially dangerous Genetically modified organisms.

Looking forward to immediate action,

Thanking you,

Place: Bangalore  
Date: 2/07/2011

Shivani Shah,  
Sustainable Agriculture Campaigner.  
Greenpeace India.

## ANNEXURE 1C:

To:

Dr. B.S Yediyurappa,  
Chief Minister,  
Govt of Karnataka.

Dear Sir,

### **Re: Demand to immediately stop all GM field trials in Karnataka in the wake of blatant violations of Biosafety norms at GM corn experimental seed production site by Monsanto**

Never in the past had crops that we cultivate had to undergo such scrutiny, and rightfully so, as in the case of GE crops.

Genetically Engineered (GE) crops are organisms created artificially in labs through a process called recombinant DNA technology. The unpredictability and irreversibility of Genetic Engineering and the uncontrollability of GE crops in the environment coupled with studies pointing at the potential risk to human health and environment has resulted in a controversy across the world around the need for introducing such potentially risky organisms. This had also resulted in most countries in the world putting in place a precautionary approach towards GMOs reflected in their regulatory systems. India currently has a regulatory system in place, the intention and efficiency of which had been under question.

The debate on GM crops had reached a shrill note when GM crop promoters tried to push through Bt Brinjal. But due to widespread public opposition and due to opposition from several state governments including yours, Bt Brinjal was put under an indefinite moratorium. Even after this central government agencies like the Genetic Engineering Approval Committee [GEAC] has been permitting numerous open air experiments of GM crops most of which are food crops. **Karnataka, Unfortunately has become a hotbed for such risky experiments which could threaten the health of the citizens, the environment and livelihood of agriculture community in the state.**

We are writing this letter to share with you the blatant violations of legal and Biosafety norms by Monsanto at their Seed Production location for two transgenic corn hybrids containing stacked cry2Ab2, cry1A.105 (Event MON 89034) & cp4epsps (Event NK603) genes<sup>3</sup>, These violations have been documented by Greenpeace along with various media agencies in Karnataka on 2/07/2011. At Bannihatti P.A. Village of Sindagi Taluk, Bijapur District, Karnataka where Monsanto is doing seed production of its transgenic corn, it has been found that company has flouted every required norm or procedure to ensure biosafety from regulated field experiments. What is most worrying is the fact that the biosafety assessment of GM corn has not been completed while such open experiments leading to seed and transgene leakage has been permitted.

The following are the major violations that Greenpeace has documented.

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<sup>3</sup> <http://www.moef.nic.in/divisions/csurv/geac/decision-nov-104.pdf>

- a. GM corn cobs with viable seeds have been lying at the field, which was harvested almost a month ago (June 1, 2011) leading to concerns about seeds from the plot spreading to nearby areas and volunteer plants coming up in the upcoming season. Thus the rule to destroy all residues properly after the GM crop has been harvested has been violated.
- b. The existing guidelines [2008] for field experiments of GM crops in confined conditions also says that all crops, including the refuge, has to be destroyed post the harvest. In this case the farmer has been allowed to keep the refuge, which could already be contaminated with the transgenes from the GM corn. This raises serious concerns about the health to the farmer and his family who may have consumed the corn and also about the possibility of these contaminated seeds spreading further. As a matter of fact, the refuge was left over by the company for the farmer to use as feed for his cattle.
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- d. Most alarmingly there was neither a fence around the trial plot while the trial was happening nor any sign board indicating that the field had a regulated GM corn undergoing trial.
- e. Bijapur does not have a functional District Level Committee (DLC) in place neither the Deputy Commissioner, Bijapur nor the Joint Director of Agriculture knew about the existence of such a body or of any field trial of GM crops happening in the district. According to existing regulatory regime, a DLC is a mandatory body in any place where field trials are permitted/in progress.
- f. Monsanto has executed a seasonal agreement with the farmer's relative . This is in contravention to the guidelines set forth by GEAC for the usage of farmers fields for confined field trials ,which says that the applicant has to have a 3 year lease agreement with the farmer whose plot is being used. This is also to ensure that proper post harvest monitoring of the plot can happen.
- g. There was no information given to the farmer on what precautionary measures need to be taken to ensure biosafety norms are adhered to before or after the trial.

While these are the violations we could document almost after a month after the harvest of the GM corn, one shudders at the thought of the infinite instances of contamination that would have happened while the GM crop was on the field. We are sending the video documentation of the field and other relevant evidences collected along with this letter which substantiates our concerns.

Civil society across the country had been highlighting the various problems with GM crops and the haphazard manner in which their open releases in name of field trials are happening in our country. Agreeing to these concerns Hon'ble Chief Minister of Bihar Shri Nitish Kumar and Hon'ble Chief Minister of Madhya Pradesh Shri Shivraj Singh Chauhan have already written letters to Central Government and stopped any open air Field Trials of GM crops in their states respectively.

It is unfortunate that GEAC lacks seriousness when it comes to such grave violations of its own rules and regulations by reckless seed companies. This we fear would endanger the food, farming and environment in our country.

We are sending the video documentation of the field and other relevant evidences which substantiates our concerns. Since agriculture and health are state subjects and both are under threat from such experiments of GM crops and in the light of all the new evidences, we urge you to take immediate action against Monsanto India ltd, whose reckless actions in conducting an experimental seed plot has put on risk the food supply in our country in general and in the state of Karnataka in

particular. We demand that the company be blacklisted by your government. .

Further to ensure the health and environment safety, the region around this trial site should immediately be cordoned off and a contamination study of the region should be ordered.

Given the the threat that GM crops poses we also demand that no more field trials be permitted in the state of Karnataka. This is critical to keep our food and environment safe from potentially dangerous Genetically modified organisms and also to ensure that the growth of organic/ecological farming for which your government has be come a leader in India .

Looking forward to immediate action,

Thanking you

Shivani Shah,  
Sustainable Agriculture Campaigner,  
Greenpeace India.

Place: Bangalore

Date: 2/07/2011



## ANNEXURE 2

From: **Thanal Mail** <[mail.thanal@gmail.com](mailto:mail.thanal@gmail.com)>

Date: 2 July 2011 17:47

Subject: From Coalition for GM Free India - Re. Cancellation of field trial approval of GM rice of Dept. of Botany, Calcutta University

To: "M. Fayazuddin" <[mffarooqui@nic.in](mailto:mffarooqui@nic.in)>

Cc: Ranjini <[warrier@nic.in](mailto:warrier@nic.in)>, [jairam54@gmail.com](mailto:jairam54@gmail.com), [jairam@sansad.nic.in](mailto:jairam@sansad.nic.in)

July 2nd, 2011

To,

Shri M F Farooqui,

Chairperson,

Genetic Engineering Appraisal Committee,

Ministry of Environment & Forests,

Paryavaran Bhawan, CGO Complex,

Lodhi Road, New Delhi 3.

Dear Shri Farooqui,

### **Re: Cancellation of field trial approval of GM rice of Dept. of Botany, Calcutta University**

As you know, GEAC has granted permission to the Department of Botany, University of Calcutta to conduct event selection trials on seven events of transgenic rice, as per the minutes of the GEAC meeting 104, dated 15/11/2010. As against the isolation distance of 10 metres proposed by the applicant, GEAC has granted permission subject to an isolation distance of 200 metres at the trial site<sup>[1]</sup>. The rice trials were permitted to be conducted at the Chinsurah Rice Research Station (RRS), West Bengal.

Further to this in the 106<sup>th</sup> meeting of GEAC held on 11/01/2011 the issue of isolation distance was brought up again in response to a "query raised by DDG-ICAR wherein he has clarified that the prescribed isolation distance as per IMSCS, 1988, for inbred lines is 3 meter and for hybrids it is 200 m." <sup>[2]</sup> Based on this query and clarification, GEAC modified its earlier approval and granted a no-objection to the field trial with 10 metres isolation distance as originally sought by the University of Calcutta.

We also have information from the RRS, Chinsurah (dated 21/1/2011) in response to an RTI application, that 'the event trial may not be possible in the Rice Research Station conforming to the isolation distance stipulated by GEAC and that the net house that has been constructed is not suitable for any GM research'. They further informed that 850 indigenous varieties of rice are being preserved in this research station.

This series of decisions by the GEAC are extremely objectionable and unscientific on the following grounds:

- There is a clear conflict of interest in Dr Swapan Datta, DDG-ICAR and a GEAC member intervening in the matter of this application, that too after a GEAC meeting has already

taken a decision – it is his spouse, Dr Karabi Datta who is the principal investigator in these GM rice trials (<http://botany.caluniv.in/profile.asp?uname=kdutta>). Worse, it can even be said that this is Dr Swapan Datta's project, given that he is associated with this project in Calcutta University (<http://botany.caluniv.in/profile.asp?uname=swapankdutta>), as part of his ongoing research projects. So, GEAC is essentially allowing applicants to decide for themselves under what conditions their field trials can be conducted, when granting permissions! This is a clear compromise on biosafety concerns and driven by shameful and unacceptable conflict of interest of a GEAC member. Dr.Swapan Datta, DDG-ICAR, instead of staying away from the decision making process has directly intervened and influenced the GEAC decision in favour of the applicant (in this case his wife, for a project in which he is involved!). GEAC acceded to his submission, without considering his conflict of interest with regard to the project and without seeking another independent opinion on the matter.

- It is also clear that this 10 m isolation distance is unscientific. Seed certification standards cannot be applied to GM contamination-related safety standards – further, scientific data clearly shows that pollen flow in rice is dependent on wind speed etc., and can be up to 110 mts at times. Further, while seed certification standards are meant for maintaining purity of seeds, the isolation distances in such open air trials of completely untested products (the GM lines cannot be termed as notified and so on, since these transgenic lines have not been tested or approved!) are to prevent the spread of a modified, untested living organism. In this case even the minimum stipulation according to the Supreme Court directive of 200 mts isolation is also being violated.
- Further, the RRS is maintaining 850 rice varieties all of which are being jeopardized by this trial. Has the GEAC even considered this threat to the diversity of these rice varieties being maintained by the RRS? As we have been pointing out time and again, the GEAC does not seem to be capable of preventing contamination or leakage and repeated instances in our regulatory history have proven it in the past.

We demand that this field trial permission be immediately revoked in view of the bio safety concerns and the conflict of interest in the decision making process. It is also important that Dr Swapan Datta step out of the GEAC given his GM crop development associations (like other members who have done so in the recent past). We urge you to initiate the process of purging the GEAC of its conflicting interests and lack of scientific rigour, and take immediate steps to rectify GEAC's blatant disregard of biosafety issues.

Thanking you,

yours truly

Sridhar R,

Convener,

Coalition for a GM Free India.

CC: Minister for State (Independent Charge) for Environment & Forests

CC: Chief Minister of West Bengal & Agriculture Minister of West Bengal

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[1] Minutes of the GEAC meeting 104, dtd 15/11/2010 <http://www.moef.nic.in/divisions/csurv/geac/decision-nov-104.pdf>

[2] Minutes of the GEAC meeting 106, dtd 11/01/2011 <http://www.moef.nic.in/divisions/csurv/geac/decision-jan-106.pdf>

**ANNEXURE 3A:**

From: **Thanal Mail** <[mail.thanal@gmail.com](mailto:mail.thanal@gmail.com)>

Date: 4 May 2011 07:07

Subject: Sub: Cancellation of permission for GM rubber trials – reg. - Request From Coalition for GM-Free India

To: Ranjini <[warrier@nic.in](mailto:warrier@nic.in)>, "M. Fayazuddin" <[mffarooqui@nic.in](mailto:mffarooqui@nic.in)>

To:

Dr Ranjini Warriar,  
Director and Member Secretary,  
Genetic Engineering Approval Committee,  
Ministry of Environment & Forests,  
Paryavaran Bhawan, CGO Complex,  
Lodhi Road, New Delhi 3.

Dear Dr Warriar,

**Sub: Cancellation of permission for GM rubber trials – reg.**

Greetings!

On perusal of the approval letter dated 21/12/2010 sent by the Review Committee on Genetic Manipulation (RCGM) to the Rubber Research Institute of India (RRII), further to the approval by GEAC for BRL-I field trials of GM rubber in Dapchari (Thane district, Maharashtra), it is clear that our regulatory system is not ready or equipped to handle GM tree trials in the country. It is apparent that RCGM and GEAC have not even designed protocols based on international standards for GM tree trials considering many unknown serious implications these may have on environment & ecology of our country. We find that in the March meeting of GEAC (108<sup>th</sup> meeting), it is acknowledged that the current guidance document does not cover such perennial plants.

In view of this situation in addition to the inherent risks in doing field trials on GM trees in general and GM rubber specifically, we seek that the permission for GM rubber field trial be immediately cancelled.

The said approval letter along with protocols and process instructions is clearly meant for a single-season GM crop with absolutely no provisions within it addressing the requirements and processes related to GM trees. GM trees are inherently different from GM crops due to their complexity, their interactions and impact on water, soil and climate, different life forms, large habitats, longevity of decades or centuries, their low level of domestication and wide dispersal of reproductive material in addition to other issues.

It has been recognized the world over that the complexity of forest eco-systems and trees makes it imperative to have a more comprehensive field trial protocol for GM trees than for seasonal field crops. It has also been accepted that this is challenging in view of the large interactions of the forest and tree eco-systems and therefore the application of precautionary principle is of paramount importance given that the trial location also falls under the eco-sensitive Western Ghats. It is considered particularly risky to assess GM tree trials only for the engineered trait behavior (of the

concerned tree) because of its immense and varied impact on the eco-system.

The Indian regulator has not only ignored all these complexities, but has also merely reproduced the regulatory protocol for a single season crop for environmentally risky 14-year GM tree trials. This once again showcases how the regulatory regime is functioning in an unscientific, non-rigorous and unaccountable fashion.

A perusal of the approval letter brings out glaring omissions in the processes and protocols sought. An independent scientific scrutiny would point out more glaring omissions in addition to the ones mentioned below.

- The approval given for trials is valid only for 2010 as per page 6 point 9, “*This BRL-I trial permit is valid for the year 2010 only from the date of issue and would lapse automatically after this season of planting*”. This is a clear pointer that the RCGM has not considered GM trees as any different from GM crops. Further, this also shows that any planting of GM rubber now would be illegal.
- Page 2 –trial size and reproductive isolation – A mere 100 metres isolation is sought from the periphery of the plot whereas trees are known to disperse their seed and pollen widely and also be able to reproduce vegetatively. Data for *Hevea brasiliensis* shows that pollen flow is anywhere between 0.3 to 1.1 kms in a French study, for example. These transgenic trees will be visited and populated by birds, bees and other life forms with them transferring plant material (reproductive and otherwise) for 14 long years; there is no mention of how to deal with that. Page 2, in the same section it is stated that, “*any progeny plants that arise on the trial site after completion of the trial must be eliminated. It must be ensured that the conditions for reproductive isolation of all trials plants are met during the current growing season and the post harvest period*”. This tree trial will have a 14-year duration and not just the current growing season. There are many life cycle issues and progeny plants to be dealt with once the trial trees reach their reproductive stage and not only at the end of the trial. There is no process detailed about how to deal with the long life cycle and changes associated with it.
- Page 4 – The *Field Trial Report* section says that, “*the permitted party shall submit a field trial report to RCGM/GEAC within 3 months after termination/harvest of a confirmed field trial*”. Again no norms for a 14 year trial and reference to the various reporting norms during the various periods? Does that mean that the permitted party need not do any reporting during the whole 14 years till after termination of the trial?
- Page 4- The section on *Mandatory Information Submissions* mentions planting, harvesting (within that method of cleaning equipment, disposing harvested material etc), accidental release, transportation of material and so forth. There is nowhere any mention of ongoing year to year monitoring, safety precautions, dealing with plant material, tapping and submissions related to that. All documentary requirements are designed for single season crop with planting, harvesting and post harvest procedures.
- Page 5 - In the same section under disposing of materials from field trials the letter states that “*composting is not an acceptable method of disposal of plant material*”. There are 60 trees which will be around for 14 years, how are they going to deal with leaf litter, and other plant matter from month to month, season to season?

#### **Other issues:**

- Honey saps out of rubber leaves and is a major source of honey in rubber plantations (around 40% of India’s honey production), it is to be expected that this open air plantation will attract honey bees. There are no precautions and suggestions for preventing this and there is no mention at all about how to deal with this issue.
- These GM rubber trees supposedly have traits engineered to deal with drought tolerance and tapping panel dryness (TPD). Tapping of rubber trees is an ongoing process and since the

trait engineered is to check the effectiveness of the plants against TPD, it is to be assumed that tapping would have to be done to check it. However nowhere in the instructions is there any mention of how the tapping of the trees will be dealt with: how, who, when it will be done if at all, what are the safety precautions and how the latex from the 60 trees will be dealt with?

- This is a one acre plantation with 60 trees, which will also have other plant growth, including undergrowth and weeds and there is no protocol mentioned about how to deal with that plant material and also about the interaction of the trees with these.
- Every tree is a habitat on its own supporting various life forms. It is likely that these GM rubber trees may affect many life forms through unforeseen and unknown interactions. There is no thought applied that these transgenic trees could cause serious implications to the micro ecosystem.
- There is no consideration towards any adverse impact on soil by these transgenic trees. Every tree has an impact on soil with regards to soil micro-organisms and so understanding the impact of the GM Rubber trees below ground is equally important.
- Moreover there is no concern accorded to the fact that the trials are permitted for 14 years in an area that falls in an ecologically fragile region (Dapchari is part of Dahanu taluka , an ecologically fragile region). There are no specific biosafety measures detailed to ensure that there would be no adverse impacts of any kind to the ecology & environment of the region due to the trials.

As RRII is in parallel engaged in R & D on non-GM Rubber trees to meet the same objectives as that of GM Rubber, there seems to be absolutely no need to permit trials of GM Rubber in such haste with insufficient bio-safety measures and to allow the introduction of such a risky technology.

Taking all this into consideration & for safeguarding the environment, forests & ecology of our country, GEAC should immediately withdraw all the permissions given to RRII for conducting GM Rubber trials in India.

Thank you.

Sincerely,

Sridhar R

Convener, Coalition for a GM-Free India

CC:

1. Secretary, Ministry of Environment and Forests, Govt. of India, Paryavaran Bhawan, CGO Complex, Lodi Road, New Delhi-3 India
2. The Chairperson, GEAC, MoEF, Govt. of India, Paryavaran Bhawan, CGO Complex, Lodi Road, New Delhi-3
3. Chief Minister, Government of Maharashtra
4. Chief Minister, Government of Kerala

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**ANNEXURE 3B:**

**F.No. C-[12013/43/2010-CS-III](#)**  
Government of India  
Ministry of Environment and Forests

**Email: [warrier@nic.in](mailto:warrier@nic.in)**

Tel: 2436 3964

Paryavaran Bhavan,  
CGO Complex, Lodi Road,  
New Delhi - 110 003

Dated: 02.06.2011

Subject: Cancellation of permission for GM rubber trials – reg.

Dear Mr. Sridhar,

This has reference to your representation dated 4<sup>th</sup> May 2011 regarding the above mentioned subject matter. In this regard, the following points may be noted:

- (i) The Government of Kerala had earlier demanded that permission granted for GM rubber field trials be withdrawn immediately. The matter was examined by the GEAC subsequent to which a communication was sent by Chairman, GEAC and MEF clarifying the basis on which the GEAC had granted approval (copy enclosed)
- (ii) The representative of Rubber Research Institute, Kottayam has informed that they have not initiated the GM rubber field trials in Kerala in view of the objections raised by the State Government and they are pursuing with them for NOC. Field trials in Maharashtra have also not been initiated so far.
- (iii) As regards, the conditions stipulated by DBT for BRL-I trials with GM rubber, DBT/RCGM has been advised to reexamine the matter taking into consideration the biology of the rubber plant and intended use. Accordingly a copy of your representation has been forwarded to DBT.

With regards,

Yours sincerely,

(Dr. R. Warriar)  
Director

Mr. Sridhar R,  
Convener,  
Coalition for GM-Free India  
C/o Thanal,  
H-3, Jawahar Nagar, Kawdiar,  
Thiruvananthapuram – 695 003  
[mail.thanal@gmail.com](mailto:mail.thanal@gmail.com)

**ANNEXURE 3C:**

From: **Thanal Mail** <[mail.thanal@gmail.com](mailto:mail.thanal@gmail.com)>

Date: 3 July 2011 20:54

Subject: From Coalition for GM Free India - Cancellation of permission for GM Rubber trials - reg.

To: "M. Fayazuddin" <[mffarooqui@nic.in](mailto:mffarooqui@nic.in)>

Cc: Ranjini <[warrrier@nic.in](mailto:warrrier@nic.in)>

03 - July - 2011

To,

Shri M F Farooqui,  
Chairperson,  
Genetic Engineering Appraisal Committee,  
Ministry of Environment & Forests,  
Paryavaran Bhawan, CGO Complex,  
Lodhi Road, New Delhi 3.

Subject: Cancellation of permission for GM rubber trials – reg.

Dear Shri Farooqui,

Please refer Dr. Warriar's letter dated 2nd June 2011 in response to the letter by the Coalition for GM Free India regarding the above mentioned subject matter.

While we appreciate that GEAC has taken quick action and asked RCGM to re-examine the matter on GM Rubber, this is not enough. The letter clearly shows that the permission given by GEAC was not founded on adequate and scientific protocols that keep biosafety as an utmost priority. Moreover, the various issues raised in our letter has not at all been resolved or explained. In such a situation GEAC needs to revoke the permission granted for the GM Rubber tree trial. We have specifically pointed out that precautionary principle is of paramount importance since the selected trial locations fall in Western Ghats which is recognised as Ecologically Sensitive Region and declared as one of Important Biodiverse Regions in the World.

We were informed that RRII had plans to begin the GM Rubber trials in July 2011 and before this is initiated, it is important that GEAC informs RRII not to start the GM Rubber tree trials.

We urge GEAC to act immediately with promptness, cancel the permission given for GM Rubber Field trials and keep us informed on this matter.

Regards,

Sridhar R  
Convener,  
Coalition for a GM Free India

Thanal  
H-3, Jawaharnagar, Kawdiar P.O. Thiruvananthapuram, Kerala  
India PIN 695 003  
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