HM Treasury and Department for the Environment, Transport and the Regions

OPTIONS FOR REDUCING THE ENVIRONMENTAL IMPACT OF PESTICIDE USE

Consultation Response from BCPC

Introduction

BCPC welcomes the Government's decision to invite views on the results of the recently completed research project before any decision is made about the possible introduction of a tax on pesticide use in the UK. BCPC is pleased to have the opportunity to comment on the questions posed in DETR News Release 283 as its wide representation of organisations involved in all aspects of practical crop protection (see Annex) allows it to present a uniquely broad overview of the issues involved.

BCPC's principal aim and its objectives are wholly in line with current Government policy which seeks to limit the use of pesticides to the minimum necessary for the effective control of pests, compatible with the protection of human health and the environment. BCPC's members, collectively and individually, have been at the forefront of research and the development, dissemination and implementation of practical guidance to put that policy into effect.

BCPC's answers and its comments are presented in the order of the questions in DETR News Release 283, the original text of which is reproduced in italic type.

Many of the questions in the Consultation Document are worded in a way that presupposes a 'tax on pesticides' is to be introduced. BCPC has answered all these questions, but such answers should not be taken to imply that BCPC is in favour of the introduction of either a 'tax on pesticides' or a 'tax on pesticide use'. It should be clear from this response that BCPC does not consider such a tax to be appropriate or the most effective way of achieving the Government's declared aims, and the answers to all questions should be read in this light.

Note
BCPC endeavours to provide a balanced view on all issues associated with crop protection. However, in order to prevent conflict of interest, members of the BCPC Board of Management who have direct responsibility to the Government have not been asked to contribute, as individuals or on behalf of their organisations, to the preparation of this particular communication. They will receive a copy of the final version along with all other Council members. BCPC will be pleased for this response to be made public.

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Issues relating to the design and impact of a possible tax or charge on pesticides

The Government's present consideration of the case for introducing a tax on the use of pesticides is based very largely on the ECOTEC report 'Design of a Tax or Charge Scheme for Pesticides' (March 1999). The questions in the Consultation Document arise primarily from issues raised in that report. The report shows how a tax on pesticides might be designed and indicates that such a tax is likely to reduce pesticide use. To the extent that pesticide use might be so reduced, there may be a concomitant reduction in adverse environmental effects arising from the use of pesticides. However, the report does not present any significant analysis of possible adverse environmental effects that could arise

from changes to current husbandry practices that pesticide users might adopt to mitigate the effects of the tax on their businesses. It would be perverse if an 'environmental tax' levied on pesticides had the effect of increasing adverse environmental effects while reducing pesticide use.

For example, growers of winter cereals would likely attempt to reduce pesticide usage by increasing cultivations and delaying sowing dates. Both of these changes in the husbandry of the UK's most widely grown crops would lead to increased nitrate leaching, which is already a target for environmental reduction. Similarly, growers of high value crops affected by soil-borne pests and diseases will try to find clean (uninfected) land to avoid the need for pesticide use. This change is likely to lead to the ploughing up of more grassland than at present. This, too, would be environmentally undesirable because it would again increase nitrate leaching and, perhaps more importantly, result in wildlife habitat loss.

These wider issues should be properly evaluated before any decision is made if such perverse effects are to be avoided.

Principle of a tax or charge

a. Does an economic instrument, such as a tax on pesticides, meet the Government's criteria for a good environmental tax, as set out in the Statement of Intent on environmental taxation (see annex)?

It is BCPC's view that a tax on pesticides of the kind suggested in the ECOTEC report would not in practice meet the Government's criteria for a good environmental tax as set out in the Statement of Intent on Environmental Taxation. While the 'polluter pays' principle is generally accepted, and there is evidence that some uses of some pesticides can have some adverse environmental effects, it would be extremely difficult to devise and administer a tax that would target such uses without undesirable side-effects and unreasonable costs of tax collection. Any general tax on pesticide use would have an adverse distributional effect on the farmer and grower sector, whose financial circumstances have worsened considerably since the ECOTEC report was prepared. Marginal producers, often smaller family businesses, will be most affected. Any tax on pesticide use which is imposed unilaterally within the UK will worsen the international competitiveness of UK producers who currently use pesticides.

b. Are there other factors or measures, such as those covered at question (q) below which would be more effective in reducing the environmental damage associated with pesticide use? What lessons can we learn from other countries' experience?

BCPC believes that all of the measures mentioned at question (q) below would contribute more effectively to reducing any adverse environmental effects associated with pesticide use than would the introduction of a tax on pesticide use.

On the basis of the information in the ECOTEC report entitled "Review and Assessment of Other Countries' Experience with Pesticide Taxes" (submitted to DETR in February 1998), we would suggest that none of approaches described would properly meet the UK Government's criteria for a 'good environmental tax' as set out in the Statement of Intent on Environmental Taxation. It should also be noted that several of these other countries have taken a quite arbitrary approach to pesticide use reduction, eg "50% reduction by product weight (or active ingredient weight) by year nnnn". This contrasts markedly with the UK approach: that the use of pesticides should be limited to the minimum necessary for the effective control of pests, compatible with the protection of human health and the environment.

Coverage of tax

c. Pesticide is a term often used in broad or undefined way. However, for the purposes or a tax or charge it would be necessary to establish a clear definition of the substances to be covered. What would need to be included in the coverage of a possible tax on pesticides? How could a definition be framed in legislation? Are there any existing definitions which might be adapted for a tax?

There need be no confusion about the term 'pesticide'. It is clearly defined in the Food and Environment Protection Act 1985 (FEPA), with an elaboration in the Control of Pesticides Regulations 1986. This definition is used for all current regulatory purposes in the UK and is well understood and accepted throughout the relevant industries. In as much as the intention may be to consider a 'pesticide tax', that definition would be fully adequate.

However, as the ECOTEC report makes clear, there are products used other purposes which cause pollution and may have adverse environmental effects. If the intention is to target uses of products which cause adverse environmental effects, it would not be appropriate to construct any related tax on the basis of use as a 'pesticide' as defined in FEPA.

d. Would a possible tax on pesticides need to apply to:
- commodity chemicals, such as sulphuric acid, where they are used for pesticidal purposes?

If there is any case for a tax on the use of pesticides, it would be appropriate to include all products, including commodity chemicals, when they are used as pesticides, because the intent would be to reduce any adverse environmental effects arising from 'use as pesticides'.

- veterinary medicines, such as sheep dip and louse control, which contain the same active ingredients as certain pesticides?

Given that the stated intent is to reduce adverse environmental effects, it would be perverse not to include within the scope of such a tax, products which could cause similar adverse environmental effects to those that may be attributed to pesticides *senu stricto*. This would be particularly the case for any products that contained the same active ingredients as pesticides.

- pesticides used for non-agricultural purposes (e.g. home and garden use)?

If there is any case for a tax on pesticide use with the stated aim of reducing adverse environmental effects, it would be appropriate to levy that tax on all uses that might cause such adverse environmental effects. Certainly, difficulties would arise if a tax were levied only on some uses of products approved for several 'fields of use'. It would not be logical to exclude non-agricultural uses as some of these have been the sources of some of the more widespread incidences of pollution.

Would there be any difficulties in the scope as suggested above? What would be the impact on the environment, and on pesticides users, of excluding such products from the scope of any tax?
We take this question to refer to the possible exclusion from a 'pesticide tax', of commodity chemicals, veterinary medicines and pesticides used for non-agricultural purposes. Given that the intended purpose of such a tax has been stated to be to reduce adverse environmental effects resulting from pesticide use, and not simply to impose a tax on farmers and growers or on pesticides *per se*, such exclusions would be illogical where these products and uses may cause similar adverse environmental effects.

e. The ECOTEC report notes that the problem of imports is one which needs to be addressed in order for a tax to have the intended environmental impact. How best could this be done?

There should be few problems with imports of pesticides made by pesticide manufacturers and major distributors. There are, however, likely to be very real problems in dealing with imports made by farmers' groups and by individual farmers. The costs of administering any tax on pesticide imports and of ensuring compliance will be high, disproportionate to the tax-take, and an unreasonable burden on small businesses if passed on in full to such importers. This does not, however, argue for exemption for imports if a tax on pesticide use is introduced.

f. In light of the points above, at what point in the supply chain should a tax be levied?

In general, any tax should be levied at the point in the supply chain where the total cost of collection will be minimised, ie taking all public sector and private sector costs into account. As indicated in the ECOTEC report, this will generally be at the first point of sale within the UK. Special arrangements will inevitably be required for own-use and other parallel imports.

Base of the instrument

g. Any instrument should seek to reflect, in some manner, two factors that are relevant to the risk posed by the substance concerned:

- *hazard - the intrinsic harmful properties of a substance;*
- *probability of harm arising from exposure to people and the environment during, or resulting from, use.*

The analysis implied by the statement here is an over-simplification. The intrinsic harmful properties of a substance may not reflect the hazard it might present in practice. Similarly, the quantity used may bear little relation to actual exposure of non-target organisms that may be at risk. For example, consider the following three insecticides, all of which, in standard laboratory tests, appear to be very toxic to bees:

Active ingredient	LD_{50} oral test	LD_{50} contact test
deltamethrin	79 ng per bee	51 ng per bee
lambda-cyhalothrin	38 ng per bee	909 ng per bee
oxamyl	78 ng per bee	270 ng per bee

source: The Pesticide Manual 1999 (1 ng = 1 nanogram = 0.000000001 gram)

Crop spray products containing lambda-cyhalothrin approved for use as pesticides in the UK carry the statutory label precaution statement "Extremely dangerous to bees", indicating the highest category of risk to this non-target organism. Crop spray products based on deltamethrin, with similar intrinsic properties in the standard laboratory toxicity tests, carry the statutory label precaution statement "Dangerous to bees", ie a lower risk category, because field experience has shown that normal use does not, in practice, present the hazard to bees that would be expected from the low LD_{50} values obtained under laboratory conditions. The labels for approved crop insecticide products based on oxamyl do not carry any reference to bees at all because these products are applied only as soil-incorporated granules and so there is no direct exposure of the non-target organism.

As this example shows, it is not at all easy to assess likely adverse environmental effects simply from a knowledge of the intrinsic properties of the active ingredients and the extent of their use. A proper assessment would require a variety of other factors to be taken into account, especially the way in which the product will be applied and the uses for which it has

been approved. Where a requested use might present an undesirable environmental effect, that use can be prohibited (not approved) or specific conditions attached to the approval to avoid the undesirable effects.

It is appropriate here to draw attention to an important aspect of the UK system of approvals for pesticides which was largely ignored in the ECOTEC report: approvals are granted for pesticide products and not for active ingredients. Clearly, information about the biological, chemical and physical properties of the active ingredients of the product is relevant and is considered in some detail in the approval process. However, approval is given (or withheld) for a formulated product which may contain just one or several active ingredients. The approval for efficacy relates to the product and to claims made for its intended uses. Similarly, statutory precautions in terms of operator and consumer safety and environmental safety relate to the product and the uses that are actually approved. This approach thus takes account not only of the intrinsic properties of the individual active ingredients but also of any combined effects the active ingredients may have, the effects of the product formulation and the specific ways in which the formulated product will be used. These are all relevant to the efficacy of the product; similarly, they are all relevant to any environmental effects that could arise from the use of the product. Thus, if obvious anomalies are to be avoided, any system for levying an environmental tax on pesticide use must be based on an appraisal of the potential adverse environmental effects of pesticide products as approved.

Which would be the most effective or practical option on which to base a possible tax on pesticides:

It must first be made clear that 'the most effective option' may not be the same as 'the most practical option'. We take 'the most effective option' to mean a base for any proposed tax on pesticide use that would be the most effective in contributing to the underlying aim, ie to reduce any adverse environmental effects that may arise from the use of pesticides. Under this option the base of any tax should be one that properly reflects the extent and magnitude of any adverse environmental effects and would take account of the points made immediately above. There would, however, be very real difficulties in putting this into practice, some of which are mentioned in the ECOTEC report.

The approaches adopted in the ECOTEC report illustrate some of the options that might be considered 'the most practical', ie that would be easiest to implement. With all of these, there would be significant anomalies in that the levels of tax on different products would not necessarily reflect the differences in any adverse environmental effects their use might cause in practice. To base any tax on such a 'practical option' because it is convenient, would be unfair and discriminatory.

- *the weight of the active ingredient;*

This would be wholly inappropriate because the biological and chemical effects per unit weight of active ingredient vary so much for the substances used as pesticides. For example, some active ingredients will be applied at rates of hundreds of grams per hectare to achieve a desired pesticidal effect while others will be applied at rates of only grams per hectare to achieve the same pesticidal effect. There is not necessarily a simple correlation between pesticidal efficacy per unit weight of active ingredient and any adverse environmental effect per unit weight of active ingredient. However, the great disparities in biological effect per unit weight indicate that weight of active ingredient would not be a sound basis for any tax intended to reduce adverse environmental effects.

- *the dose;*

In as much as the label recommended dose for a pesticide product represents a unit of biological activity (ie an acceptable pesticidal effect per unit area treated) and an assumption can be made that any adverse environmental effect will be directly related to the dose applied, the product dose could be used as the base for the suggested tax. Where the user applied a dose less than that recommended on the label (now a common practice), this approach would have the logical effect of reducing taxation on activities that reduced any adverse environmental effects.

It should be stressed that this relates to the dose of product and not to the implied doses of the active ingredients. Certainly, the doses of the active ingredients should not be used in any simplistic way as the base for any tax. As explained above, the assessment of any adverse environmental effects should be done on a product basis as in the present approval process.

- *or an ad valorem tax ?*

This would be wholly inappropriate as the prices of pesticide products bear no obvious relation to any adverse environmental effects that may arise from their use. Indeed, when newer products are introduced with environmental benefits over established products, these newer products are likely to be more expensive than the older ones, at least initially. An *ad valorem* tax in this situation would have the perverse effect of encouraging continued use of the products with the greater adverse environmental effects.

h. Would any of these options have significant adverse environmental or administrative implications?

The comments at question g above are relevant to this question also. As explained, adverse environmental implications could result from basing any tax on the weight of active ingredient or applying it *ad valorem*. Using the product dose as the base is unlikely to have adverse environmental implications, provided always that a proper assessment of any adverse environmental effects has been made for the product and its approved uses.

The administrative implications for any soundly based environmental tax on pesticide use are that a proper assessment of any adverse environmental effects should be made (perhaps as an extension of the approval process) on each product in relation to the uses for which approval is granted. This could determine the level of tax that might then be levied on the product dose.

How might mixtures of different active ingredients be addressed?

As made clear above, we believe that any tax on pesticide use should be determined on the basis of known or potential adverse environmental effects that might arise from the approved uses of formulated products, taking all relevant factors into account. Products containing more than one active ingredient would thus be covered.

Illustration of banded tax

i. A banding system would be intended to reflect the intrinsic properties of the chemicals concerned, and hence the environmental hazard associated with their use. This might encourage reductions in the use of the most hazardous products, and could avoid perverse

switching to more hazardous pesticides in response to a tax. Do you consider that there is a case for structuring a tax so that pesticides with a higher hazard or risk are liable for a higher rate of tax?

If there is to be an environmental tax on any group of products, it would logical that the rates of tax should reflect the potential adverse environmental effects of those products. Thus, if there is any case for an environmental tax on pesticide use, it would be perverse if the rate of that tax did not increase with higher environmental hazard.

Banding of any tax would be an administrative convenience. This would be acceptable provided the basis of the bandings was sound, ie properly reflected the potential adverse environmental effects likely to arise from the approved uses of formulated pesticide products.

In passing, we note that the wording of this question appears to confuse 'hazard' and 'risk'. These terms are not synonymous in the context of assessing environmental effects. 'Risk' arises from 'hazard' only when there is a probability of 'exposure'. Thus a product with a high environmental hazard may present a low environmental risk because there is very little environmental exposure. The only rational basis of an economic instrument intended to reduce the adverse environmental effects resulting from the use of any product can be an assessment of the adverse environmental effects that may arise from the permitted uses of that product, ie the environmental risks.

j. Do you consider that there is a consistent and robust methodology with which to calculate a hazard ranking for pesticides?

There are several methodologies available to calculate 'hazard rankings' for pesticides. However, the relevance of such calculations in the present context must be questioned. As explained in the comments on questions g, h and i above, 'hazard' alone would not be a satisfactory basis for any tax intended to target uses with potential adverse environmental effects. For this, an assessment of 'environmental risk' is required. This is more difficult than the assessment of 'environmental hazard' alone, but would provide a more relevant basis for any tax intended to discourage the less desirable uses.

k. Do you consider the banding mechanism suggested by ECOTEC to be appropriate or practical?

The banding mechanism suggested by ECOTEC would be 'practical', in that it could easily be implemented. However, as will be clear from the comments on the preceding questions, it is BCPC's view that it would not be 'appropriate' in the context of the Government's aims for effective environmental taxes.

The impact of a tax or charge

l. What ability do farmers have to alter their use of pesticides? Do food retailers have a role in influencing the use of pesticides?

Farmers use pesticides for four main purposes: to reduce loss of yield; to maintain produce quality; to preserve cosmetic quality; and to ease harvestability. Farmers do have considerably ability to alter their use of pesticides, but they operate under some very compelling constraints. In the fresh produce sector, these are increasingly imposed by the major food retailers.

Given that the most cost-effective crop production system will generally be one that produces high yields (so that the farmer maximises his returns on all the costs of the business),

farmers aim to prevent significant yield loss. In some crops this could be achieved by changing the plant variety grown, but frequently the market dictates the varieties it will purchase. There are numerous examples of market led demands for disease susceptible varieties which farmers can grow profitably only with the use of pesticides. In other cases it is substantially more profitable to grow higher yielding, disease susceptible varieties and use pesticides than to grow lower-yielding, disease resistant varieties.

Depending on the crop and the pest, disease or weed, a farmer may have some opportunity to reduce the dose of fungicide, insecticide or herbicide necessary to give an acceptable level of control. Where such opportunities exist, farmers already exploit them widely and this clearly will have beneficial environmental effects. For other combinations of crop and pest or disease or weed, control is always difficult and farmers have no opportunities to reduce the dose of pesticide applied, even in ideal circumstances.

Pests and diseases that affect produce quality will generally require a high level of control, limiting the scope for reducing the dose of pesticide applied.

The growth of the supermarket sector in the fresh produce market has greatly increased the demand for high levels of cosmetic quality, ie blemish-free and pest-free produce even when the superficial blemish or the presence of the pest would not affect the eating quality of the produce. This has undoubtedly led to an increase in the use of pesticides on fruit and vegetable crops. Farmers and growers cannot afford to compromise in this area, because failure to meet the supermarket-specified standard of cosmetic quality will result in high losses from rejected produce and loss of the supply contract if the problem persists.

Food retailers already have a major influence on pesticide use on UK farms and holdings. However, the messages they send are sometimes contradictory in that they want to promote produce that is grown with as little pesticide as possible, but they also demand the highest levels of cosmetic quality. In mitigation it has to be said that in sending these conflicting messages they are largely reflecting the conflicting demands of their own customers. The standards of cosmetic quality that are acceptable in the organic ('pesticide-free') sector are not generally accepted in the non-organic sector. Supermarkets in particular, have a major role in informing and educating their customers about the food they purchase and they could encourage a move away from some of the present, undesirably high levels of cosmetic quality now demanded by those customers. The prospects for this, however, are extremely limited as the food retailing sector is becoming even more competitive.

m. Do you consider that ECOTEC's analysis of the impact of a potential tax upon farmers is accurate?

Only partially and then only at the aggregate level relating principally to yield loss effects in arable crops. While it may be appropriate to treat some aspects of farmer decision-making about pesticide use and its financial consequences as continuous variables (implicit in the models used by ECOTEC), many decisions about pesticide use and the consequential financial effects on the farm business are discontinuous ('lumpy'). In this latter situation the ECOTEC models are unlikely to be appropriate.

For example, even where a farmer is considering only potential yield loss due to pest or disease attack or weed infestation, his only practical decision will often be to treat the crop with an appropriate pesticide and at the full dose recommended by the manufacturer to achieve satisfactory control. Such decisions, and their financial effects on both costs and returns, have an 'all-or-nothing' effect which is not easy to model at the farm level. Such considerations apply with even greater force to decisions about pesticide use that have a bearing on produce quality or cosmetic quality. Because the quality standards are so high in terms of the absence of blemishes and itinerant pests, and because the financial implications of produce rejection are so serious for the farm business, the grower has no realistic option

but to use a comprehensive pesticide programme or quit production. Where failure to meet the required standards results in an unplanned cancellation of a contract with a major food retailer, the financial consequences for the farm business can be disastrous.

It may be argued that, taken at the aggregate UK level, these highly discontinuous decisions and their highly discontinuous effects can be regarded as sufficiently continuous for the purposes of economic modelling of the overall effect the introduction of a tax might have. That, however, would disguise the very real effects at the farm level which must be properly assessed if the distributional consequences are to be understood.

We would also draw attention to the limitations mentioned in the ECOTEC report about this aspect of the work. It is there suggested that more attention needs to be given to behavioural and knowledge aspects of pesticide use and adjustments in production practices to allow a more adequate assessment of the potential impact on farm incomes. The authors themselves also point out that very little is known about the way in which the use of specific products will change in the wake of a price increase that is applied differentially across products, ie reflecting the differing adverse environmental effects.

A more fundamental limitation of this economic appraisal is that it takes no account of the potential adverse environmental effects that might result from changes in husbandry practices adopted by farmers and growers to reduce pesticide use. Some examples were given at the head of this document. This aspect was beyond the scope of the ECOTEC project, but it should assessed before any decision is made about introducing a tax on pesticide use.

n. What impact would a tax have upon the international competitiveness of individual agricultural sectors?

Any tax on pesticide use applied only to UK agricultural producers would inevitably reduce their international competitiveness because they have to operate in international markets that are highly competitive in both price and quality.

o. What impact could it have on other industries and sectors?

To the extent that any tax reduced further the present very low returns from agriculture in the UK, this would have adverse effects on all businesses which service the agricultural sectors using pesticides. Businesses directly involved with the manufacture and distribution of pesticides and with the provision of related consultancy would all be adversely affected if the overall use of pesticides was significantly reduced as a consequence of introducing a tax on pesticide use.

p. Do you foresee that a possible tax could have any impact on food prices in the UK?

It is most unlikely that a tax on pesticide use within the UK would have any measurable effect on food prices in the UK because the main food retailers already source their supplies internationally and are in a very strong position to impose competitively determined prices on their suppliers. UK food producers are, with rare exceptions, 'price takers', and not 'price setters'.

Complementary measures

q. The introduction of any tax on pesticides could form one element of the Government's policy for pesticide minimisation. The Government's aim is to seek ways in which that policy can best be pursued. A number of possibilities can be considered, some of which have

already been identified in the Action Plan produced by the Pesticides Forum and aimed at encouraging responsible use of pesticide, which could enhance the environmental effectiveness of any instrument and reduce the costs to users of adjusting to its introduction. These include:
- advice and training and technology transfer of measures to reduce environmental risk from pesticide use;
- mechanisms to promote best practice (such as farm audits) and to achieve targeted reductions in impacts (such as buffer zones) as well as support for agri-environment schemes;
- development and refinement of regulatory controls, for example to cover risk assessments of the indirect effects of pesticides;
-further research into the environmental effects of pesticides and use for alternative techniques such as biological controls.

BCPC strongly supports all of these initiatives identified in the Action Plan of the Pesticide Forum. As indicated in the Introduction above, BCPC and its Corporate Members have been directly involved in such developments and continue to give them high priority. (Examples of relevant BCPC publications can be supplied on request.)

BCPC considers the measures set out at question q will more effectively target pesticide uses that may have adverse environmental effects than would any tax on pesticide use. Certainly, the approaches described are likely to be more effective in achieving desirable changes in the activities of pesticide users than the comparatively blunt economic instrument of a pesticide tax.

r. The Government would be grateful for views on these, or other, options and how these might best be used in conjunction with an economic instrument to enhance the overall environmental effectiveness of an instrument and discourage the use of those pesticides presenting greatest risk to the environment.

As will be clear from most of the comments above, BCPC does not consider there is, at present, a case for introducing an economic instrument as an environmental tax on pesticide use. We believe the Government's aim of reducing any adverse environmental effects arising from pesticide use will be more effectively achieved by other means.

It is appropriate to reiterate here our concern that any assessment of the effects of a possible tax on pesticide use should include an evaluation of the environmental consequences of changes pesticide users might make to current practices to mitigate the effect of the tax on their businesses. There are several situations where the changes that might be made to reduce pesticide use could have greater adverse environmental effects than current pesticide usage.

s. Are there other measures which could form part of a package of measures to minimise pesticide use and encourage a shift away from the most damaging pesticides?

BCPC considers the practical options for the foreseeable future are well covered by the Action Plan adopted by the Pesticides Forum. We would, however, stress that there is a need to ensure adequate funding for current work in these areas and for these new initiatives.

Annex - THE BRITISH CROP PRODUCTION COUNCIL (BCPC)

BCPC brings together a wide range of organisations involved in the science and practice of crop production.

The members of its Board of Management represent the interests of Government departments, the agrochemical industry, farmers' organisations, the advisory services and independent consultants, distributors, the research councils, agricultural engineers, environment interests, consumer opinion, training and overseas development.

In addition a far wider range of organisations contribute to the work programmes of expert Working Groups. These currently include Working Groups focused on Weeds, Pests & Diseases, Applications, Seed Technology, Minor Uses and Sustainable Production Systems. A Science Strategy Group coordinates the work of the Working Groups.

The corporate members of BCPC currently are:

Agricultural Engineers Association
Association of Applied Biologists
Association of Independent Crop Consultants
Biotechnology and Biological Sciences Research Council
Crop Protection Association
British Institute of Agricultural Consultants
British Society for Plant Pathology
Campden & Chorleywood Food Research Association
Department of Agriculture and Rural Development – Northern Ireland
Department for Environment, Food and Rural Affairs
represented by Pesticides Safety Directorate.
Environment Agency
Imperial College, London
Lantra
National Association of Agricultural Contractors
National Farmers' Union
National Consumer Federation
National Institute of Agricultural Botany
Natural Environment Research Council
Scottish Executive Environment and Rural Affairs Department
Society of Chemical Industry – Pest Management Group

Representatives of these Corporate Members, together with a small number of Individual Members elected by the Representatives of the Corporate Members, comprise the Board of Management.

British Crop Protection Enterprises Ltd. (BCPE) is a wholly owned subsidiary of BCPC which, on behalf of BCPC, organizes conferences, symposia, workshops and discussion fora and publishes a wide range of information in both electronic and hard copy format.

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