## 1. PROTECTION OF HEALTH AND THE ENVIRONMENT

## COMMITTEE RECOMMENDATIONS

## That Council:

- 1. Write to Environment Minister David Anderson supporting his Ministry's plan to classify Nonyl Phenol and its Ethoxylates as 'toxic' under the Canadian Environmental Protection Act. Recognition that this class of chemicals is toxic partially due to its endocrine-disruptive effects is an important development to help protect human health and the environment.
- 2. Write to Health Minister Alan. Rock asking for his support of the Federal Standing Committee on Environment and Sustainable Development's recommendations in their May 2000 report 'Pesticides, Making the Right Choice for the Protection of Health and the Environment' including:
  - the phased-in ban on pesticides for cosmetic lawn-care purposes;
  - the reassessment using the upgraded standards noted in the Committee's report of all pre-1995 pesticides by no later than the year 2006. Presently, 7000 pesticides are registered for use in Canada, many of which contain active ingredients that have not been re-evaluated for years.

DOCUMENTATION

1. Councillor D. Holmes report dated 20 September 2000 is immediately attached.

# REGION OF OTTAWA-CARLETON RÉGION D'OTTAWA-CARLETON

# REPORT RAPPORT

SUBJECT/OBJET	PROTECTION OF HEALTH AND THE ENVIRONMENT
FROM/EXP.	Councillor D. Holmes
TO/DEST.	Co-ordinator Community Services Committee
DATE	20 September 2000
Our File/N/Réf. Your File/V/Réf.	03-07-00-0059

## **REPORT RECOMMENDATIONS**

That the Community Services Committee recommend Council:

- 1. Write to Environment Minister David Anderson supporting his Ministry's plan to classify Nonyl Phenol and its Ethoxylates as 'toxic' under the Canadian Environmental Protection Act. Recognition that this class of chemicals is toxic partially due to its endocrine-disruptive effects is an important development to help protect human health and the environment.
- 2. Write to Health Minister Alan. Rock asking for his support of the Federal Standing Committee on Environment and Sustainable Development's recommendations in their May 2000 report 'Pesticides, Making the Right Choice for the Protection of Health and the Environment' including:
  - the phased-in ban on pesticides for cosmetic lawn-care purposes;
  - the reassessment using the upgraded standards noted in the Committee's report of all pre-1995 pesticides by no later than the year 2006. Presently, 7000 pesticides are registered for use in Canada, many of which contain active ingredients that have not been re-evaluated for years.

That the Community Services Committee approve the following:

WHEREAS the pesticide Chlorpyrifos commonly known as Dursban is being banned the United States and;

WHEREAS Chlorpyrifos is one of the insecticides which has been used in lawn-care treatments for the killing of white grubs:

BE IT RESOLVED that the Health Department of Ottawa-Carleton write to Minister Rock requesting a ban of Diazinon (a more toxic alternative to people and birds) and Chlorpyrifos in Canada and that the Health Department provide public information regarding the use of non-pesticide alternatives to treating white grub infestations and announce this information both in the fall of 2000 and spring of 2001.

## BACKGROUND

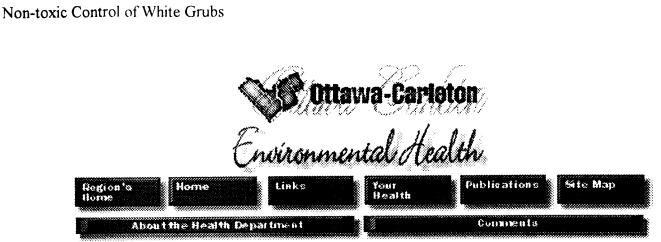
I am requesting that the above-cited Motions be approved by Committee and Council, as appropriate.

Attached by way of background is the following:

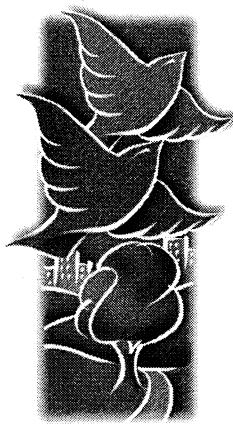
- 1. Documentation from the Regional Health Department on the Non-Toxic Control of White Grubs/Contrôle non toxique du ver blanc;
- 2. Executive Summary: Key Directions for Change from the Federal Standing Committee on Environment and Sustainable Development May 2000 report, "Pesticides - Making the Right Choice for the Protection of Health and the Environment".

Approved by D. Holmes

Attachs:



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# Non-toxic Control of White Grubs

Here is how you can control white grubs safely:

White grubs are the larvae (children) of scarab beetles. Most in Ottawa-Carleton are "June bugs" (Phyllophaga spp.), but some are Japanese Beetle and every few years (as in 1999) there is a population peak of European Chafer Beetle. They eat grass roots.



By the time the damage to your lawn is apparent, it is too late to correct the problem for this year. The roots have already been eaten. You have to concentrate on next year's lawn. Begin by overseeding.

If you have too many white grubs, they are telling you that your lawn is unhealthy. Nearly always, they are telling you that you are using too much fertilizer. Your grass roots are weak and soft - a salad for grubs, especially when the hot dry summer comes. Healthy soil, with nutrients released slowly by decomposition, lets grass roots grow steadily all year. "Green-up" fertilizers, particularly the liquid ones, force the grass to grow far faster than it would naturally.

The first step is to reduce your use of artificial fertilizers. Local organic turf specialists apply far less nitrogen than is recommended on most fertilizer bags. Mow high, often and lightly, and leave the clippings on the lawn - they are the best slowrelease fertilizer there is for your grass.

## Non-toxic Control of White Grubs

...

Then, water no more than once a week, but water deeply when you do, so your grass roots grow deep and strong. Put a container on your lawn when you water, and don't stop until there is at least 2 cm of water in it. For most sprinklers, that takes a full hour.

If you don't use insecticides, put up a nesting box for starlings. They raise their young on white grubs and, with their sharp yellow bills, make only tiny holes in the turf to get them. (Skunks eat them too, but leave paw-sized holes.)

If you have sprayed your lawn with insecticides within the past few years, you will have killed most

of the natural parasites of white grubs. You can help to redress this imbalance by restoring the natural nematode population of healthy grassland. (Coldtolerant strains are available at several local garden centers.) They are a waste of



money, though, unless you plan to stop using insecticide sprays for good.

Non-toxic, bird-friendly, lawn care works. For more information, see Ecological Lawn Care in Ottawa-Carleton and Ground Covering Plants for Ottawa-Carleton.

#### En français

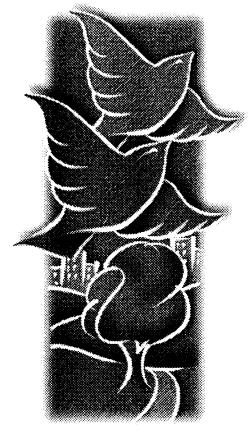
Lazt Updatect. Dernière mise à jour -- September ∂oeptembre 2000. © Region of Othava-Carleton, Health Department, 1999 © Région of Othava-Carleton, Service de la sainté, 1999





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existante.



# Contrôle non toxique du ver blanc

Voici comment contrôler le ver blanc de façon sécuritaire :

Le ver blanc est la forme larvaire (immature) du scarabée. À Ottawa-Carleton, la plupart des vers blancs sont des larves de «hannetons communs» (Phyllophaga spp.), mais ont trouve aussi des larves de scarabées japonais. De même, à intervalles de quelques années, la population de hannetons européens s'accroît (comme ce fut le cas en 1999). Ces larves se nourrissent des racines d'herbe.

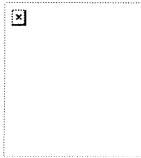
Une fois que vous constatez les dommages causés à votre pelouse, il est trop tard pour tenter d'éliminer ces larves, car elles ont déjà dévoré les racines d'herbe. Il vous faut alors concentrer vos efforts sur la pelouse de l'été suivant. Pour ce faire, il vous faut notamment resemer dans la pelouse

Une infestation de vers blancs indique que la pelouse n'est pas en santé. Dans la majorité des cas, cela signifie qu'on utilise trop d'engrais. Les racines d'herbe sont fragiles et tendres, et les vers blancs s'en régalent, en particulier durant les périodes chaudes et sèches de l'été. Un sol en santé, où les éléments nutritifs sont libérés lentement par décomposition, permet aux racines d'herbe de pousser à un rythme régulier tout au long de l'année. Les engrais qui visent à faire verdir la pelouse, en particulier les engrais liquides, font pousser l'herbe plus rapidement qu'elle ne pousserait

## naturellement.

La première étape consiste donc à réduire votre utilisation d'engrais. Les spécialistes locaux du traitement organique des pelouses appliquent beaucoup moins d'azote que ne le recommandent la plupart des fabricants d'engrais commerciaux. Laissez votre pelouse suffisamment longue. Tondez-la plus fréquemment et légèrement, et laissez les rognures d'herbe en place, car elles constituent le meilleur engrais à libération lente.

N'arrosez votre pelouse qu'une seule fois par semaine, mais assurez-vous de bien détremper le sol afin de favoriser la croissance de racines profondes et robustes. Placez un contenant vide sur la pelouse, et arrosez jusqu'à ce que deux centimètres (2



cm) d'eau s'y soient accumulés. Dans la plupart des cas, il faut compter une heure complète d'arrosage.

Si vous n'appliquez pas d'insecticide sur votre pelouse, installez un nichoir à étourneaux. Ces oiseaux nourrissent leurs petits de vers blancs. Leur long bec pointu leur permet de ne percer que de tout petits trous dans la pelouse pour atteindre les vers. (Les mouffettes se nourrissent aussi de vers blancs, mais elles creusent de gros trous dans les pelouses.)

Si vous avez utilisé des insecticides au cours des quelques dernières années, vous avez éliminé la plupart des parasites naturels du vers blanc. Vous pouvez aider à redresser la situation en rétablissant la population naturelle de nématodes. (Des souches résistant au froid sont vendues dans plusieurs centres de jardinage de la région.) Cette option ne sera toutefois rentable que si vous prévoyez d'arrêter définitivement d'utiliser des insecticides.

L'entretien non toxique des pelouse, sans risque pour les oiseaux et les êtres humains, procure de bons résultats. Pour obtenir plus de détails à ce sujet, consultez nos dépliants intitulés <u>Entretien non</u> toxique des pelouses et <u>Plantes de couverture pour</u> <u>Ottawa-Carleton.</u> Pesticides - Making the Right Choice for the Protection of Health and The Environment



# EXECUTIVE SUMMARY: KEY DIRECTIONS FOR CHANGE

Canadians live in one of the healthiest nations in the world. They also live in the world's second largest country, renowned for its rich biodiversity and varied ecosystems. If this impressive legacy is to be preserved and passed on to future generations, decisive action must be taken to curb the use of pesticides and other harmful pollutants.

The 30-year old *Pest Control Products Act* may soon be amended; draft legislation is being developed. This opportunity must be seized to integrate in the new legislation the fundamental principles that will guide pest management decisions in the years to come. The package of amendments proposed by the Pest Management Regulatory Agency (PMRA) in January 1999 contains serious omissions and flaws. In the Committee's opinion, the new legislation must be comprehensive and progressive in design and thrust. It must articulate a vision for pest management that will withstand the test of time. It must also set forth a blueprint for action that, in the short term and the long term, will best protect the health of Canadians and the environment.

In preparing this report, the Committee was guided by the following principles:

- to make the protection of human health and the environment the absolute priority in pest management decisions, especially the protection of children and other vulnerable populations;
- to ensure that a precautionary approach is taken in decision-making;
- to promote and increase reliance on pollution prevention strategies; and
- to foster public confidence by actively informing and involving Canadians.

The Committee recommends that these principles form the basis of the new legislation. However, they must be enshrined not only in the preamble, but in the legislation's operative sections as well. Statements in the preamble, while an important expression of the government's intentions, do not have the weight or enforceability of the operative sections. Real action is called for and not just statements of good will. It is therefore essential that these principles be "operationalized" throughout the new Act, including codifying them in an administrative clause similar to section 2 of the new *Canadian Environmental Protection Act, 1999*.

# Giving Absolute Priority to the Protection of Human Health and the Environment

The protection of human health and the environment must be paramount under the new legislation. Notably, this guiding principle must be incorporated in the mandate that the Committee recommends be enacted for the PMRA and the Minister's advisory body, the Pest Management Advisory Council. By giving these two bodies a clear, unequivocal statutory mandate, it will no longer be necessary to balance public safety and environmental concerns against the needs of growers and industry. Rather, public safety and the environment will be paramount. This strengthened mandate will be more in keeping with the reason for creating the PMRA within Health Canada, as opposed to another department such as Agriculture and Agri-Food Canada. It should also dispel existing concerns about the Agency's dual or conflicting mandate and its

## industry-driven agenda.

Making the protection of human health and the environment the central priority must be backed up by comprehensive research. Pesticides are known to play, or are suspected of playing, a role in a myriad of diseases and developmental abnormalities, including cancer (brain, breast, stomach, prostate and testicles), childhood leukemia, reduced fertility, damage to the thyroid and pituitary glands, lowered immunity, developmental abnormalities and behavioural problems. However, pesticides that might cause harm, but that have not been proven to do so on a weight of evidence basis, are not likely to be pulled off the market or refused registration. It is therefore critical that research be undertaken to provide that degree of scientific certainty needed to support precautionary action.

The Committee recommends that research be conducted in a number of key areas. In general, more comprehensive and in-depth research must be carried out on the effects of pesticides on the environment and human health. More specifically, there is a pressing need for increased research on endocrine disruptors, including the development of a specific protocol to detect the effects of endocrine disrupters on human health. Research must also be carried out on chemical groups of pesticides whose effects on human health are still relatively unknown, such as synthetic pyrethroids and phenoxy herbicides. Research is also needed in the case of integrated pest management strategies. If reliance on pesticides is to be reduced, it is important that alternative strategies be developed.

In recognition of the special vulnerability of children, the Committee also recommends that research be continued to determine the adequacy of having an additional safety factor of 10 in the risk assessment process to protect child health. A comprehensive pesticides research program must also be developed in relation to child health, which must focus on the developmental and physiological characteristics of children and their daily activities. Research is also needed to determine the effects of pollutants on fetal development.

In addition to these research initiatives, the Committee recommends the creation of three databases under the new legislation. One database would document the sale of pesticides throughout the country, as well as selected pesticide uses, thus providing vital information that might establish links between pesticide use and harm to human health and the environment. The second database would document any adverse effects that had been reported in relation to pesticide use. Registrants, in particular, would contribute to this database as a condition of registration; the Committee recommends that they be required to conduct post-registration monitoring on a routine basis and report any adverse effects observed. The third database would provide information on alternatives to pesticides and would thus constitute a key tool in support of pollution prevention strategies.

While the protection of human health and the environment requires that research and monitoring activities be stepped up to better identify the problems related to pesticide use, the evidence of harm is sufficiently clear-cut in some cases to justify concrete action. This is the case with respect to Track 1 substances under the federal Toxic Substances Management Policy. As the Committee recommends, the new Act must explicitly disallow registration or re-registration of any pesticide containing a Track 1 substance. The PMRA must also set out science-based inherent toxicity criteria. Any new pesticides that meet these criteria should also be refused registration, while those already on the market should be de-registered.

The new Act must specifically require an assessment of cumulative and aggregate risks, as well as the possible interaction between pesticides, particularly in relation to setting maximum residue limits. Tests for neurotoxicity and endocrine disruption should also be carried out on a mandatory basis.

Formulants and contaminants, including microcontaminants, must be subject to thorough assessment, and if any of these substances are found to be toxic within the meaning of section 64 of the *Canadian Environmental Protection Act, 1999*, information to this effect would have to be disclosed on the product's label as a condition of registration. The new Act must also explicitly retain efficacy evaluations as part of the value assessment, thus ensuring that such evaluations are not dropped in an effort to harmonize the Canadian system with that of other countries. Given the lack of long-term data on pesticides used on genetically modified plants, the Committee recommends that such uses be treated as a new use under the revised legislation, thus necessitating an assessment and an amendment to the certificate of registration if the use is approved.

As a buffer against the current uncertainty surrounding the exposure and sensitivity of children and other vulnerable groups to pesticides, the new Act should prescribe a minimum additional safety factor of 10 in assessing risk. This additional safety factor should be applied in all cases and not just in determining the maximum residue limits in foodstuffs. What constitutes an "unacceptable risk" should be based on child health criteria.

More than 7000 pesticides are registered for use in Canada, many of which contain active ingredients that have not been re-evaluated for years. In fact, of the 500 active ingredients contained in registered products, over 300 were approved before 1981 and over 150 before 1960. Because most of these were assessed under the "adult male" standard applied in the past, the Committee believes that the new Act should require the formal re-evaluation of all pre-1995 pesticides by no later than the year 2006, using the upgraded assessment standards recommended in this report, including an evaluation of all product ingredients (active ingredients, formulants and contaminants), cumulative and aggregate effects and the additional safety factor of 10. To ensure that pesticides do not go unreviewed for years, as is currently the case, the new Act must also require that registered pesticides be formally re-evaluated every 15 years from the date of last review. Provision must also be made for special reviews on an ad hoc basis. In the Committee's opinion, a special review should be undertaken on a mandatory basis when a pesticide has been banned for safety reasons in a member country of the Organization for Economic Co-operation and Development (OECD). Special reviews could also be allowed on other grounds, such as scientific advancement or public requests.

Considerable energy is being devoted to the harmonization of pesticide regulatory systems among Canada's major trading partners. While harmonization may have merit, it must not become a race to the bottom. To guard against this possibility, there must be a clause in the operative sections of the new legislation to preclude a weakening of the Canadian standards.

# A Precautionary Approach in the Decision-Making Process

The lack of scientific certainty should not be allowed to impede effective action to protect human health and the environment against actual or suspected harm caused by pesticides. It is, therefore, imperative that the new Act embrace a precautionary approach in all aspects of

decision-making. The Committee recommends the adoption in the new Act of the precautionary principle that is contained in the 1996 Protocol to the London Convention of 1972 on disposal of waste at sea. This definition, in the Committee's opinion, provides broader scope for precautionary action than the other definitions examined. Adjusted to reflect the pesticide context, this definition of the precautionary principle would provide that :

Appropriate preventive measures are to be taken where there is reason to believe that a pesticide is likely to cause harm, even when there is no conclusive evidence to prove a causal relation between the pesticide and its effects.

Many of the recommendations outlined above are based on a precautionary approach. For example, the Committee recommends the inclusion of an additional safety factor of 10 in the assessment process because too little is known about the effects of pesticides on children and other vulnerable populations. The recommendation to treat as a new use the application of a pesticide on a genetically modified plant is also based on a precautionary approach because too little is known about the effects of pesticides too little is known about the effects of pesticides on a precautionary approach because too little is known about the effects of pesticides on a precautionary approach because too little is known about the effects of pesticides on genetically modified plants.

The Committee recommends that the new pesticides Act require that protection of human health and the environment according to the precautionary principle be Canada's sole objective in any action to harmonize Canadian standards with those of other countries. A further recommendation requires the application of the precautionary principle to resolve disputes between federal departments and agencies about particular pesticide uses. These measures are in addition to the more general recommendation to enshrine the precautionary principle in the preamble, as well as in an administrative clause under the new Act.

# Placing the Emphasis on Pollution Prevention Strategies

The most effective way to protect human health and the environment is undeniably to prevent the generation of polluting substances in the first place, rather than minimizing or managing the risks associated with their use. Pollution prevention must thus be emphasized in the new Act. Federal departments and agencies should lead the way. They must set an example by routinely reporting their pesticide uses to Parliament and by developing and employing alternative strategies and pesticide use reduction plans.

The need to promote sustainable pest management strategies that seek to reduce use, risk and reliance on pesticides must be made an explicit component of the PMRA's mandate under the new legislation, as must the need to develop safer pest control products. To further these goals, the PMRA should develop and implement a comprehensive pesticide reduction policy that would apply to all of its activities, including the registration process. The new Act must authorize the application of the substitution principle to promote the replacement of pesticides with less toxic products and non-chemical alternatives.

The PMRA must also revise its integrated pest management program to give priority to reduced pesticide use and the development of organic farming practices. Given that the promotion of integrated pest management strategies is a shared responsibility with other federal, provincial and territorial departments, a number of recommendations are directed not at the PMRA, but at the federal government, to promote organic farming, notably through increased research and public

Pesticides - Making the Right Choice for the Protection of Health and The Environment

education and the provision of financial incentives to make this alternative more economically viable.

Most witnesses were of the opinion that the use of pesticides for cosmetic, lawn-care purposes should be disallowed. Given what is known or suspected about the harmful effects of these products and given the purely esthetic purposes they serve, the Committee favours a ban on the use of pesticides for cosmetic purposes. Such a ban would constitute a major step toward pollution prevention. It is questionable, however, whether the Canadian public would accept a country-wide ban at this time. It is therefore essential to enlist public cooperation by sensitizing people to the risks of pesticides through an aggressive education campaign. Hopefully, the use of pesticides for cosmetic purposes will become as frowned-upon as smoking cigarettes in public, thus making a full moratorium a more socially acceptable solution. The Committee, therefore, proposes a more gradual approach. We recommend that the new Act disallow all new registrations of pesticides for cosmetic uses. The new Act should concomitantly disallow registration renewals for those currently on the market, once their registration certificate has expired. Since registrations must be renewed every five years, the Committee's proposal essentially amounts to a maximum five-year phase out of pesticides used for cosmetic purposes.

# Building Public Confidence by Actively Informing and Involving Canadians

The need to involve Canadians in the decision-making process and to inform them about the pesticides used in their environment was one of the clearest messages received by the Committee. It is essential that Canadians have confidence in the federal pest management system set up for their benefit and in the Agency entrusted with its administration. The key to fostering public confidence is to enact an open and transparent process.

The Committee makes a number of recommendations to open up the PMRA's "closed shop." The new legislation must provide the broadest possible disclosure of information to the public. It must also facilitate the public dissemination of this information through the mandatory establishment of an electronic public registry that would provide detailed information not only about the pesticides in use or proposed for use in Canada, but also about the PMRA's policies, proposals, decisions and actions. In addition, the PMRA should be required to provide a digest of its activities through the tabling of an annual report in Parliament. Members of the public must not only be informed, they must also be provided with an opportunity to participate in decision-making. The new legislation should contain mandatory provisions to notify the public of pending proposals, decisions. Canadians should also be given the opportunity to appeal major registration decisions in appropriate cases. In order to encourage the general public to come forward when an offence has been or is about to be committed, the new Act should provide comprehensive whistleblower protection.

In recognition of the special information needs of health care professionals, the Committee further advocates the establishment of a 24-hour medical emergency information service on pesticides and other toxic substances to enable medical practitioners to make timely diagnoses and prescribe appropriate treatment. It is also important that workers who handle pesticides be given the same rights and protections afforded other workers who deal with chemicals. Pesticides must, therefore, be brought within the family of chemicals covered by the Workplace Hazardous Material Information System (WHMIS).

The Committee places great stock in informing and involving Canadians. For this reason, we have recommended that the PMRA be expressly mandated under the new legislation to inform and educate the public about pesticides and the risks associated with their use. The responsibility of educating the public about the risks associated with the use of pesticides and the availability of less harmful alternatives, however, should not be borne exclusively by the PMRA. Many federal government departments, as well as provincial and territorial governments, can play a crucial role in this regard. They can also make a vital contribution toward the development of alternative pest management strategies. Cooperative and coordinated action within government is essential and the Committee has made a number of recommendations to this effect. In particular, cooperative action is needed at the federal level through the development and implementation of comprehensive memoranda of understanding.

The use of pesticides must come to be regarded as a measure of last resort rather than the option of choice. Attitudes about pesticide use must be changed through aggressive public education programs. Effective steps must be taken now to protect human health and the environment against the risks associated with pesticide use. The new legislation must reflect this priority in all of its provisions, notably, by promoting the use of sustainable pest management strategies that seek to reduce use, risk and reliance on pesticides.

This new focus should be reflected in the title of the new legislation. The title of the current Act - the *Pest Control Products Act* - implies that pesticide "products" are needed to control pests. This message is erroneous and must be corrected. The new Act should be renamed the "Pest Control Act" to reflect the more comprehensive approach to pest management advocated in this report.