

## Pest Control in Trinidad and Tobago

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"OOOOOOH MYYYYYYYY GAAAAAAAWD! There's a rat in the house!!!!!" screamed Ronda, as she jumped onto her freezer. "Shurlon call the exterminator immediately!"

These are incidents that occur regularly every day. Homes, farms, businesses, schools and other places can become exposed or infested with pests. When situations such as these cannot be tolerated or controlled because of sanitary and health requirements, costly impacts on the structure of buildings, or various other reasons pest control becomes necessary. As such as in our culture we seem to find that the use of chemicals as the easiest and most convenient way of getting rid of our pests. However the responsible approach to controlling pests is by the employment of integrated pest management (IPM) principles which can mitigate the effects of pesticides and it must be emphasized that the use of chemicals in some cases should be a last resort.

Under the Pesticides and Toxic Chemicals Act, 1979, Amendment No.11 of 1986 "pest" is defined as any insect, bird, rodent, fish, mollusc, nematode, fungus, weed, alga, micro-organism or virus, and any other kind of plant or animal life that is injurious, troublesome, or undesirable to any crop, stored produce, food, feed, wood, clothes, textiles or other fabrics, and any other inanimate objects, or which are objectionable from the point of view of public health or hygiene, and includes any ectoparasites of man, and ectoparasites and endoparasites of animals, except that by Regulations any pest may be specifically exempted or excluded. Thus according to the definition there are many types of pests that may need to be controlled.

Integrated Pest Management (IPM) is a balanced environmentally sensitive approach to pest management that relies on a combination of common-sense practices to reduce pest

populations to tolerable levels. This approach use cultural, biological, mechanical and chemical and sometimes legal procedures that are environmentally compatible, economically feasible, and socially acceptable and as such provide least possible hazard to people, property, and the environment. For most IPM programmes there are four basic areas to address, preventative measures, monitoring, forecasting and action controls.

The IPM approach can be applied to both agricultural and non-agricultural settings, such as the home, garden, and workplace. IPM takes advantage of all appropriate pest management options including, but not limited to, the judicious use of pesticides.

Some people will perform simple pest control techniques at home but sometimes expert pest control operators are employed as the need arises. The majority of pests controlled by these pest control operators in Trinidad and Tobago include rodents, ants, cockroaches, termites and flying insects. Very few operators will carry out fumigation techniques.

Certain pests find their way into our homes no matter how careful we are with our housekeeping. Effects of this can include damage to food, clothing, rugs, or furniture while others carry diseases. In keeping with IPM principles in minimizing pesticide applications the following proactive guidelines are advisable in controlling pest populations

- Cleanliness, not leaving food scraps around, is perhaps the most important step in preventing the establishment of some pests such as cockroaches.
- Garbage should be kept in tight containers and should be disposed of in a timely manner.
- Remove all breeding areas, including plant and animal refuse, should be removed.
   Especially in the case of avoiding mosquitoes infestations all objects that may hold water should be removed from the environment. Storage containers for water should be tightly covered. Small waterways near your home should be kept free from debris or vegetation that slows the flow of water. Proper drainage should also be constructed.
- In the case of pests such as termites infested wood should be replaced. Pests such as these also thrive in damp environments and thus conditions that permit excessive moisture should be corrected. In modern day the use of materials other than wood in foundation areas which cannot be protected from excessive moisture is an option citizens can explore. In cases where this is not possible treated wood should be used for house foundations and other moist areas where wood is likely to be subject to pests such as termites. However, it is important to note that some chemicals used to treat the wood cannot be used indoors in certain cases.

There are certain strategies persons who are affected by pests can utilize. Some of these are outlined below.

• Sometimes devices are quite effective in certain cases, for example glue traps or light traps. If the pesticide application becomes necessary certain critical areas should be

- treated, for example, under sinks, undersides of drawers, along baseboards, and other places where free moisture occurs.
- Mosquitoes inside the home can be killed by the use of biological control. For example, mosquitoes are often controlled by putting <u>Bacillus thuringiensis</u>, a bacterium that infects and kills mosquito larvae, in local water sources. The treatment has no known negative consequences on the remaining ecology and is safe for humans to drink. The point of biological pest control, or any natural pest control, is to direct eliminate a pest with minimal harm to the ecological balance of the environment in its present form.
- For maximum results the location of the nest is critical. Once this is destroyed or controlled the chances of a repeat infestation is low.
- Repellents can be used also as an alternative to aid in the protection of humans from mosquito bites for 1 to hours according to label direction.

It must be emphasized that if you choose to use pesticides that control pests in and around the home there are certain precautions that need to be taken. It must be determined quite carefully that a pesticide application is required and professional pest control operators can give the proper advice on this. However, the following are some points that persons would take into consideration if a decision is reached to use pesticides.

- The pesticide you plan to use is registered in Trinidad and Tobago for your particular situation. This means that the Pesticides and Toxic Chemicals Control Board would have reviewed the registration dossier on a product quite comprehensively and made a decision to have this product registered for sale or use in Trinidad and Tobago.
- Again when all other non chemical strategies are exhausted and a decision is made to use a pesticide the correct formulation should be used for the specific situation. This is the form in which the active chemical is combined with other ingredients for application.
- It is important to note that chemicals formulated for use on agricultural crops may be
  too hazardous for home use. There are products whose labels clearly allow indoor use.
  It is important to note that some formulations developed for use inside homes may
  damage plants because of the type of solvents present. Thus one should seek proper
  advice on this.
- Following from the last suggestion it only makes sense to carefully follow directions on the pesticide container label. A pesticide must not be used in any manner that is not described on the label.
- Most insecticides are suggested for use by chemical name, not brand name. It is
  imperative to look at the active ingredients stated on the label before you buy.

- In general, do not use oil-based solutions around asphalt, vinyl or tiled floors. Some
  insecticides have other important restrictions, such as not for use on rugs or tapestries.
   Some labels may have restrictions which must be noted.
- In Trinidad spraying with one of the household insect aerosols containing pyrethrins or pyrethroids is a common practice to control insects. However, this should be done when individuals are not indoors especially children. The problem with this application is that the pyrethrins can degrade rapidly and some insects require a residual application for this to be effective. In these cases, for example cockroaches and ants, a longer lasting bait station is applicable.

It is to be noted that integrated pest management systems were initially developed to help manage pests which affect the agricultural sector. The IPM was developed in response to steadily increasing pesticide use that resulted in pest control crises where there were outbreaks of secondary pests and pest resurgence following development of pesticide resistance. Taken into consideration were the correlations of increasing health risks and the increased use of pesticides as well.

As a problem solving approach to pest control, IPM can be introduced at any level of agricultural development. There are many cultivation practices involved in the control of pests. Some of these include proper tillage of soil, burning of diseased organisms, use of tolerant or resistant varieties, crop rotation and even altering planting and harvesting times can be effective. Tillage of soil for example can bury insects and prevent further spread of diseases. Harmful organisms must be monitored with adequate methods and tools, where available. Based on the results of the monitoring it is decided whether and when to use what pest management techniques. The approach must be geared towards sustainable biological, physical and other non-chemical methods. This must be given priority over chemical methods if they provide satisfactory pest control. Pesticides should only be applied as a last resort when there are no adequate non-chemical alternatives. The pesticides applied shall be as specific as possible for the target pest and shall have the least side effects on human health, non target organisms and the environment, while their use should be kept at minimum levels. Lastly there should be the monitoring of the success of the applied pest management

You often need patience and persistence to control an infestation; it may take time and several insecticide applications. If pests persist, you may want to seek help from a reputable exterminator.

Pest control refers to the regulation or management of a species defined as a pest, usually because it is perceived to be detrimental to a person's health, the ecology or the economy. In Trinidad and Tobago there are many pest control operators that offer a variety of techniques to control various types of pests. According to the Pesticide and Toxic Chemicals Act, 1979, Amendment No.11 of 1986 a pest control operator is defined as any person who, by himself or his employees, assistants, workers or agents applies pesticides or carries out an extermination for a remuneration.

The regulations of the Pesticide and Toxic Chemicals Act, 1979, Amendment No.11 of 1986 dictate that a pest control operator requires a license to operate. As such the Ministry of Health, Chemistry/Food and Drugs, Pesticide and Toxic Chemicals Inspectorate have specific requirements pest control operators need to fulfill in order to obtain such a license. Some of these requirements involve proper storage of chemicals in such a way where there is minimum exposure to the general public and well secured, use of proper equipment to apply chemicals, use of personal protective equipment (PPE), first aid supplies and presence of fire extinguishers. But one of the most important aspects includes having experience or certification in performing pest control work. For fumigation techniques involving very toxic chemicals certification from certain institutions are required. In terms of personal health, the inspectorate also recommends medicals to be completed for all technicians on an annual basis. This is also an indication that all precautions are taken in the implementation of pest control techniques.

So Trinis if you are thinking about hiring a pest control operator it is imperative to find out if they possess a license from the Pesticides and Toxic Chemicals Inspectorate. This can be an indication that you are hiring and allowing a responsible agency into your home or place of business.

There are other criteria that should be considered when retaining a pest control company. The request for references is an important tool to ensure safety for oneself and your environment.

There should be a programme to indicate pests to be controlled, the extent of the infestation, the pesticides intended for use, and the steps you can take to minimize future infestation. The initial inspection is also necessary to create such an action plan and may even indicate that pesticides are not necessary. Another good safety tactic is to request copies of pesticide labels of what is to be used so an informed decision can be made.

Competent pest control professionals will always take the time to explain what is happening in your home or business so this can be an indicator to use when selecting an efficient agency.

One can also request estimates one can also use this as a critical tool in making such a decision. Remember quality is what you are looking for not necessarily the cheapest agency. Most importantly, choose a company that meets your pest control needs.

One should also be careful about choosing the cheapest pest control company since the service may not be of the best quality.

If someone in your home has breathing problems, such as **emphysema**, **asthma**, **or allergies**, or is in the **first three months of pregnancy**, talk to a doctor before treating your home and tell the pest control operator. They may have special advice for those people.

Even after ventilation, some pesticides may leave an odour which can last for days. Some people can smell it at very low levels. It is important to note that odours can cause throat or eye irritation, headaches, and nausea.

Pest Control in Trinidad and Tobago is well established whether in the home or in the agricultural sector and as citizens we must be aware of the proper guidelines in the use of pesticides in decreasing the associated health risks. For further information please contact the Pesticides and Toxic Chemicals Inspectorate, Chemistry/Food and Drugs Division; at 623-7544 Ext.1303/1305.

1.www.mass.gov/agr/pesticides/publications/hw\_to\_know\_before\_hiring.htm - 22k - Similar

**2.**public.health.oregon.gov/HEALTHYENVIRONMENTS/HEALTHYNEIGHBORHOODS/HEALTHYHO MES/PESTICIDES/Page... - 173k - <u>Similar</u>

- 3. Pest control <u>- Wikipedia, the free encyclopedia</u> en.wikipedia.org/wiki/Integrated\_pest\_management
- **4.** Integrated Pest Management (IPM) Principles www.epa.gov/opp00001/factsheets/ipm.htm
- **5.** Pesticides and Toxic Chemicala Act, 1979, Amended......
- 6. Plant Production and Protection Division: Integrated Pest Management

www.fao.org/agriculture/crops/core-themes/theme/pests/ipm/