Personal Protection: Topical Repellents

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Topical Repellents and IPM

• Repellents are a key to preventing bites
  – A critical component in a successful IPM program to control disease vectors

• In addition to topical repellents, EPA registers
  – Clip-ons, lanterns, table top diffusers, coils

• To maximize effectiveness, proper choice and application of repellent is critical
Registering Repellents at EPA

• EPA regulates pesticides under the Federal Insecticide, Fungicide and Rodenticide Act
  – “pesticide” is any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest

• Topical repellents are unlike other pesticides
  – Applied to humans, safe for general public
  – Used to reduce the risk of contracting vector-borne disease so must be effective
Repellents and Disease

• EPA’s mission: to protect human health and the environment
  – The Office of Pesticide Programs responds to vector-borne disease threats by:
    • Working to ensure registered pesticides are available to protect humans from disease
      – Frequently working closely with our partners at CDC
    • Promoting a strong IPM approach to pest control
Types of Repellents

• The topical repellent market has variety
  – Biopesticides
  – Conventional pesticides
  – Application by spray, lotion, clothing, etc.
  – Different active ingredients and concentrations
  – Many, many use different inert ingredients

• All of these, if registered, must conform to the same regulatory framework
Registering Repellents

• Registered repellents (when used according to the label directions):
  – Can be used without causing unreasonable adverse effects to human health
  – Have been shown to be efficacious

• But, not all repellents are the same
  – Different performance helps consumers choose which repellent is right for them and their activities
Variations in Repellent Performance

• The performance of an individual repellent may vary
  – Product formulation:
    • Efficacy of active ingredient, concentration of active
  – Individual characteristics of user
    • Personal chemistry, activity level/swimming/sweating
  – How it is applied
Differences in Repellent Performance

• The performance of an individual repellent may vary (cont.)
  – Environmental factors
    • Climate, pest pressure, storage/age of product
  – Proper and appropriate use

• Repellents do not perform well when sitting in the closet
Repellent Labeling

• Labelling is critical to proper use and performance of repellents
  – Use directions promote both safety and efficacy
  – Clear information, such as ingredients and expected protection time can help consumers choose the right pesticide for them

• EPA is committed to improving labeling of repellents
Repellent Labeling - Graphic

• At times, current labels may make it difficult for consumers to find information
  – Type of insect (tick, mosquito, etc.) and protection time are key factors in choosing appropriately

• EPA created a repellency awareness graphic for labels of skin-applied insect repellents
  – Highlights key information for consumers
Repellent Labeling - Graphic

• Graphic is voluntary – manufacturers will apply to be able to use it on labels

• EPA will review products to ensure that their scientific data meet current testing protocols
  – Protection time(s) based on multiple, reliable studies
  – Products with this graphic go through extra review
Repellent Graphic – How it Looks
Repellency Awareness Graphic

- Shows that mosquitoes are repelled
- Typical length of time product repels mosquitoes

- Shows that ticks are repelled
- Typical length of time product repels ticks
Repellency Awareness Graphic

- Intended to help consumers easily identify the repellency time for mosquitos and ticks
- EPA evaluates graphic requests to ensure that the supporting scientific data meet current testing protocols and standard evaluation processes
- Currently expediting the review of amendments to add the repellency awareness graphic
Conclusions

• Topical Repellents are a critical IPM tool
• EPA works to ensure registered repellents are effective and can be used safely
  – Labeling is key to both
  – EPA aware of labeling and seeks to improve it
• New repellency graphic will help consumers choose the right repellent for them
  – Look for it soon
Additional Information:

Web Page:  www.epa.gov/insect-repellents

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