



Personal Mosquito Repellents Available in South Dakota — 2004

*Michael A. Catangui, Ph.D., associate professor and Extension entomologist,
and
James A. Wilson, Extension pesticide education coordinator, Plant Science Department*

The most commonly available insect repellents contain either DEET or permethrin. This publication provides information on specific repellents that are registered for sale in South Dakota in Spring 2004.

Personal mosquito repellents are products that can be applied directly onto the human skin or clothing for the purpose of repelling or killing adult mosquitoes.

While repellents containing the chemical DEET can be applied directly on human skin and clothing, products containing the insecticide permethrin cannot.

Permethrin must be applied only on clothing or related apparels such as hats, shoes, and overalls several hours before being worn.

Organic alternatives to DEET or permethrin are also available for chemically-sensitive individuals.

There appears to be a limit in the duration of protection time that increasing DEET concentrations may provide. For example, a product containing 100% DEET may provide no more than 10 hours of protection from mosquito bites. The duration of protection time provided by products containing 35% and 100% DEET may not be significantly different.

The use of insect repellents containing DEET is the best way to reduce the risk of getting West Nile Virus. Products containing

DEET are the most effective mosquito repellents available. The maximum concentration currently recommended for infants (greater than two months of age) and children is 30%. The concentration of DEET in products may range from less than 10% to over 30%. Higher concentrations of DEET will protect children for longer periods of time. Select the lowest concentration effective for the amount of time spent outdoors. It is generally recommended that DEET not be applied more than once a day. For most children going outdoors, the once-per-day application of DEET will be most appropriate at dusk, one of the two times per day mosquitoes are most active, the other time being dawn.

The U.S. military uses a product containing **33.3% DEET** in extended release formulation and always in combination with **permethrin-treated clothing**. This DEET and permethrin combination is expected to provide at least **8 hours** of protection under severe mosquito biting pressures in the field.

See South Dakota Extension Fact Sheet 920, Personal Mosquito Repellents, for detailed information about South Dakota mosquitoes, DEET, permethrin, and alternative repellents.

Ask for FS 920 at your county Extension office or download it from the Internet at <http://agbiopubs.sdstate.edu/articles/FS920.pdf>

Table 1. Mosquito repellents containing 4.75% to 10% DEET.

% DEET	Brand Name of Repellent	% DEET	Brand Name of Repellent
4.75	OFF! Skintastic Family Formula Insect Repellent	7	Insect Repellent Gel
4.75	OFF! Skintastic Family Formula Insect Repellent Tropical Fresh	7	Misty Insect Repellent Spray
4.75	OFF! Skintastic for Kids Insect Repellent Unscented	7	OFF! Insect Repellent III Unscented
6.65	Cutter All Family Insect Repellent	7	OFF! Skintastic Insect Repellent II Unscented
6.65	Cutter Insect Repellent Pleasant Protection	7	Repel 7% DEET
6.65	Cutter just for Kids Insect Repellent 1	7	Repel Gel 7 IPF Insect Block
6.65	Cutter Skinsations Insect Repellent	7.125	OFF! Skintastic II Insect Repellent Unscented
6.65	Cutter Skinsations Insect Repellent 1	7.125	OFF! Skintastic Magicolor Disappearing Purple Insect Repellent
6.65	KRID Skeeter Soft Spray Insect Repellent 1	7.5	OFF! Skintastic Insect Repellent for Children
6.65	OFF! Skintastic Insect Repellent IV with Aloe Vera Unscented	7.5	OFF! Skintastic Insect Repellent Fresh Scent
6.65	OFF! Skintastic IV Summer Splash	9.5	Coppertone Bug & Sun Sunscreen with Insect Repellent Kids Formula
6.65	Walgreens Insect Repellent with Aloe Vera	9.5	OFF! Skintastic Insect Repellent with Sunscreen
6.79	Cutter All Family Insect Repellent Towelettes	10	Coppertone Bug & Sun Sunscreen w/Insect Repellent Adult Formula
6.79	Cutter Outdoorsman Insect Repellent Towelettes	10	Cutter Insect Repellent Unscented
6.79	Cutter Skinsations Insect Repellent 3	10	Cutter Insect Repellent with Sun-Screen SPF 15
7	Allstar Blitz Sta-Off Insect Repellent	10	KGRO Home Insect Repellent
7	Cutter All Family Insect Repellent 2	10	Muskol (The Original) Insect Repellent w/Waterproof Sunblock SPF 15
7	Cutter Insect Repellent	10	Repel 10% DEET
7	Cutter Insect Repellent Pleasant Protection 1	10	Repel Camp Lotion for Families
7	Cutter Skinsations Insect Repellent 2	10	Repel Insect Repellent Camp Lotion for Kids
7	Cutter Skinsations Insect Repellent with Sunscreen SPF 15	10	Solarsect

Table 2. Mosquito repellents containing 12.33% to 20% DEET.

% DEET	Brand Name of Repellent	% DEET	Brand Name of Repellent
12.33	BugSwipe Insect Repellent Towelette	17.5	Family Formula Repel Insect Block 18% Deet
12.33	Can't Bite Me Swipes with Aloe	17.5	Repel Pump Spray 18 IPF Insect Block
12.33	Total Solutions Insect Repellent Towelettes	17.5	Sawyer Deet Plus Composite Insect Repellent Lotion
14.25	Chase-MM Insect Repellent Formula 2	17.5	Sawyer Deet Plus Composite Insect Repellent Spray Pump
14.25	Off! Insect Repellent II Fresh Scent	17.5	Sportsmen Formula Repel Insect Block 18% Deet
14.25	OFF! Insect Repellent II Unscented	19	Deep Woods Off! for Sportsmen Insect Repellent with Sunscreen
14.38	Deflect Insect Repellent	19	Deep Woods Off! Insect Repellent with Sunscreen
14.38	Super Swat	19	OFF! Deep Woods Insect Repellent with Sunscreen
15	Amway D-15 Insect Repellent	20	Ben's 20 Backyard Formula
15	BugOut Insect Repellent	20	Repel 20% DEET 15 SPF
15	BugOut Mosquito Repellent	20	Repel Lotion 20 IPF Insect Block
15	BugOut Tick & Chigger Repellent	20	Repel Lotion 20 IPF Insect Block 15 SPF Sun Block
15	OFF! Insect Repellent Spring Fresh Scent	20	Repel Sun & Bug Stuff
15	Zep Insect Repellent	20	Sawyer Controlled Release Deet Formula
16.6	Ceratex AF	20	Sportsmen Formula Repel Insect Block 20% Deet
16.6	Sawyer Broad Spectrum Insect Repellent		

Table 3. Mosquito repellents containing 21.85% to 29% DEET.

% DEET	Brand Name of Repellent	% DEET	Brand Name of Repellent
21.85	Cutter Backwoods Insect Repellent Pump Spray Unscented	23.8	Deep Woods Off! for Sportsmen Insect Repellent VII
21.85	Cutter Outdoorsman Insect Repellent II Unscented	23.8	Deep Woods Off! Insect Repellent V Unscented
21.85	Family Formula Repel Scented Insect Block 23% Deet	23.8	OFF! Deep Woods Insect Repellent V
21.85	Insect Repellent	25	Ben's Backyard Formula Tick & Insect Repellent
21.85	Super Swat II	25	Ben's Backyard Formula Tick & Insect Repellent Eco-Spray
23	Cutter Backwoods Insect Repellent Unscented	25	Ben's Insect Repellent
23	Sav-On Osco by Albertsons Unscented Insect Repellent	25	Muskol Insect Repellent Spray
23	Walgreens Insect Repellent Unscented	25	PowerDeet 25 Insect Repellent for Outdoor Professionals
23.75	Amway HourGuard Insect Repellent Spray 8	25	The Original Muskol Insect Repellent Aerosol
23.75	Can't Bite Me	25	Ultrathon Spray Insect Repellent
23.75	Champion SprayOn Insect Repellent	28.5	Deep Woods Off! for Sportsmen Insect Repellent IV Unscented
23.75	Osco Insect Repellent	28.5	Deep Woods Off! Insect Repellent VI Unscented
23.75	S00856 Insect Repellent II	28.76	Ben's Wilderness Formula Tick & Insect Repellent
23.75	Scent Shield No Stinkin Bugs	28.76	CRC Double Strength Insect Repellent
23.75	Ultrathon Insect Repellent 8	29	Repel Personal Insect Repellent
23.75	Watkins Insect Repellent	29	Sportsmen Formula Repel Insect Block 29% Deet

Table 4. Mosquito repellents containing 30% to 100% DEET.

% DEET	Brand Name of Repellent	% DEET	Brand Name of Repellent
30	Army Type insect Repellent	55	BugX Insect Repellent Towelette
30	Ben's 30 Wilderness Formula	55	Repel Deerhunters Insect Repellent
30	Cutter Outdoorsman Insect Repellent Lotion	82	North Insect Repellent Towelette
30	Cutter Outdoorsman Insect Repellent Stick	95.5	Sawyer Maxi-Deet Insect Repellent Spray Pump
30	Cutter Outdoorsman Insect Repellent Unscented	95.5	Sawyer Maxi-Deet Professional Insect Repellent Spray Pump
30	Deep Woods Off! for Sportsmen Insect Repellent II	100	Deep Woods Off! for sportsmen Insect Repellent I
30	Deep Woods Off! Insect Repellent II Outdoor Fresh Scent	100	Deep Woods Off! Insect Repellent For Maximum Protection
30	Muskol Insect Repellent Lotion	100	Maximum Strength Muskol Insect Repellent
30	Muskol Insect Repellent Pump Spray	100	Maximum Strength Muskol Insect Repellent Lotion
33.33	Insect/Arthropod Repellent Lotion	100	New Muskol Insect Repellent Pump Spray
33.33	Ultrathon (TM) Insect Repellent	100	OFF! Insect Repellent for Maximum Protection
38	Classic Formula Repel Insect Block 40% Deet	100	Pic X-100 Deet
38	Muskol Ultra Insect Repellent Spray	100	Repel 100 Insect Repellent
38	Ultra Muskol Insect Repellent	100	The 10-Hour Insect Repellent
40	Deep Woods Off! for Sportsmen Insect Repellent V		

Table 5. Mosquito repellents containing 0.5% permethrin

Brand Name of Repellent	Brand Name of Repellent
Coulston's Original Duranon Tick Repellent	Repel Permanone Permethrin Trigger Spray
Cutter Outdoorsman Gear Guard Insect Repellent Unscented	Repel Permanone Unscented
Fite Bite Permethrin Clothing Spray	Sawyer Clothing Tick Repellent
Repel Permanone	Scent Shield No Stinkin Ticks
Repel Permanone Clothing and Gear Insect Repellent	

Table 6. Mosquito repellents containing natural ingredients only.

Brand Name of Repellent	Ingredient(s)
Bite Blocker for Kids	soybean oil, geranium oil, coconut oil
Repel Lemon Eucalyptus	oil of lemon eucalyptus
Fite Bite Plant-Based Insect Repellent	oil of lemon eucalyptus

*This publication is intended for use by the citizens of South Dakota.
Listing of brand names is for informational purposes only and does not imply endorsement
of one product over another or discrimination against a similar unmentioned product.*

Information is current as of March 2004.

Always read and follow product label directions and precautions.

In case of accidental poisoning call: 1-800-222-1222 (Sioux Valley Poison Control Center).

This publication and others can be accessed electronically from the SDSU College of Agriculture & Biological Sciences publications page at <http://agbiopubs.sdstate.edu/articles/ExE8147.pdf>



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