

## IDENTIFICATION

Adult bed bugs are brown, flattened, oval, wingless insects approximately 1/4" to 3/8" long. Following a blood meal, their color changes to reddish purple and the body plumps considerably to a more rounded shape. Nymphs are smaller, resembling the adult in general shape, pale colored, as small as 1/16" molting 5 to 6 times before reaching adult stage.



*Adult bed bugs are brown, flattened, oval, wingless insects who feed on human blood at night.*

Photo courtesy of Clemson University Extension Service

## DISTRIBUTION

Bed bugs are found worldwide and were uncommon in the US until recently. Bed bugs were nearly eradicated 30 years ago. They have recently become more common in major metropolitan areas, particularly in hotels and residences, and are spreading across the country.

## BEHAVIOR

Bed bugs are parasites that infest the nest of its host, humans. They feed on human blood at night when they are not likely to be noticed such as when people are sleeping, resting or sitting for long periods of time. This helps them to avoid detection. At night, bed bugs will move out from their harborage in search of exposed skin. They insert their piercing sucking mouth just below the surface of the skin to feed on human blood for 3 to 5 minutes before becoming engorged. After feedings, they retreat to their harborage.

## SITES MOST OFTEN HARBORING BED BUGS

Bed bugs tend to cluster in cracks and crevices near feeding sites. They are often found in the following areas:

- Tufts, seams and buttons on mattresses
- Box springs, bed frames and covers



*Bed bugs tend to cluster in cracks and crevices near feeding sites that can include tufts, seams and buttons on mattresses, box springs, bed frames and covers, chairs and night stands.*

- Couches and chairs
- Night stands
- Window and door moldings
- Behind wall paper and pictures
- Cracks in hardwood flooring
- Under carpet along walls
- Book cases
- Wall voids behind switch plates and outlets
- Luggage

## HEALTH RISKS FROM BED BUGS

Bed bugs have not been implicated with disease transmission, but bed bugs can harbor the pathogens (or organisms) that cause diseases such as plague, relapsing fever, Q fever, tularemia and Hepatitis B. Some people are sensitive to bed bug bites and have allergic reactions in the form of welts. Bed bugs can induce nervous and digestive disorders in sensitive



people, sleeplessness and irritability and they are generally viewed as a social stigma. Additionally, there is often a distinct smell, described as an "obnoxious sweetness", associated with infestation.

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## USE THE SMARTCAP™ ADVANTAGE AGAINST BED BUGS

Effective bed bug control involves, among other things, thorough treatment to a wide variety of surfaces within the living areas of a home or hotel room.

Cy-Kick CS SmartCap microencapsulation remains available to insects on treated surfaces such as fabric, wood, metal, paint, etc. Smartcaps, do not bind or absorb into surfaces, but remain propped up at the surface ready to cling to bed bugs as they crawl across treated surfaces. This makes Cy-Kick CS a superior formulation for spot treatment and Crack & Crevice® treatments for bed bugs.



*Cy-Kick CS smartcaps cling to bed bugs as they crawl across treated surfaces.*

## CY-KICK CS LABEL ALLOWS YOU TO USE IT WHERE IT IS MOST NEEDED

Cy-Kick CS label comes with advantages, not limitations...

*Take bed apart. Treat joints and channels if hollow, such as square or round tubing. See that the interior framework is treated. Treat mattresses, especially tufts and folds and edges. Cover mattresses with outer sheets before use. Do not apply to other bedding articles. Also treat other areas where bed bugs may be harboring. Allow treated articles to dry thoroughly before use.*

## RECOMMENDED DILUTION RATE

Indoors, apply with hand tank at 0.05% or 0.1% (1-2 oz per gallon water)

*(See label for complete use directions.)*

## CY-KICK CS CONTROL TIPS

- Spot treat wall and floor junctures in areas with suspected activity such as bedrooms, living rooms and closets.
- Crack & Crevice treatment to cracks behind baseboards, window frames, door frames, under edge of carpeting, cracks between bed frame and box spring.

## OTHER PRODUCT CONTROL TIPS

- Make dust applications to voids with Tri-Die® Silica + Pyrethrum Dust
  - Wall voids
  - Tubular framing
  - Behind electrical outlet plates

- Make directed contact applications with PT® 565 Plus XLO® Contact Insecticide to areas where no residual insecticide is desired.



*Tri-Die Silica + Pyrethrum Dust and PT 565 Plus XLO is recommended in addition to Cy-Kick CS.*

## GENERAL RECOMMENDATIONS

Thorough preparation is vital to success. For proper inspection and treatment, come to the jobsite with tools for disassembly of bed, and allow enough time to remove bedding, disassemble bed, empty night stands, pull up edge of carpet and vacuum.

- Inspect thoroughly, looking for nymphs, adults, skin casings, fecal spots and blood spots. Look quickly when moving or uncovering items, as bed bugs move quickly when disturbed.
- Treat every crack and crevice within 10 -15 feet of bed or other suspected feeding sites.
- Use the running method technique for moving the application tip along the length of cracks and crevices
- Thorough inspection and treatment is the key to successful control of bed bugs.



*Allow enough time to remove bedding, disassemble bed, empty night stands, pull up edge of carpet and vacuum for proper inspection and treatment.*

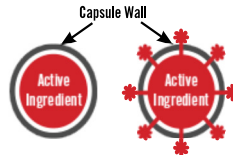
## SMARTCAP TECHNOLOGY

Exclusive SmartCap Technology creates a shell around the active ingredient cyfluthrin that increases residual control by protecting it from UV



light, weather, porous and greasy surfaces and absorption into soil or organic matter. It also acts as a barrier to diminish exposure to humans and pets

while reducing plant phytotoxicity and staining.



*The capsule wall protects the a.i. from surface conditions and the environment. The a.i. diffuses quickly out of the capsule when in contact with an insect's exoskeleton.*

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