REDLANDS PEST CONTROL

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PHORID FLY

Managing Phorid Fly Infestations

The phorid or humpbacked fly breeds in, and feeds on, moist decaying organic matter. It also frequents unsanitary areas, and has the ability to spread disease-causing bacteria onto exposed food products or food preparation surfaces when found in food facilities.

The phorids are small flies that resemble fruit flies in appearance, but unlike the fruit fly, have visibly expanded, laterally flattened hind femora and lack the red eye colour that is the classic trademark of the fruit fly.

Phorid flies are approximately 1/8 inch in length, including the wings. The most prominent feature of this fly is the rounded, elevated shape of its thorax. The high arch of the thorax gives it the common nickname of humpbacked fly. The adults exhibit a characteristically short and erratic flight. The most easily recognized behaviour of the adult fly is running rapidly across surfaces when disturbed. Under similar circumstances, most flies immediately take flight in response to nearby movement.

The reproductive potential of these flies is tremendous and very large numbers may appear in a short time. The female can deposit about 40 eggs in a 12 hour period, and lay approximately 500 eggs during her lifetime. The tiny eggs are deposited on or near the surface of decaying organic matter. Larvae emerge in 24 hours and feed for 8 to 16 days. The larvae then crawl to a drier spot to pupate. The life cycle from egg to adult can be completed in as little as 14 days under warm, moist conditions, but may take as long as 37 days under cooler or less than optimum conditions.

Phorid flies are found throughout the world and are a serious pest in food producing, food handling or food serving facilities. Health care facilities are another favourite target of this fly. The larvae have been found in the open wounds of patients in nursing homes and hospitals. Fermenting materials such as fruit, dirty garbage containers, rotten vegetables or organic deposits in drains are just a few of their favourite breeding and feeding places. Other unusual sites include poorly stored meats, damaged containers of moist foods, and organic-based glues and paints.

Adult phorid flies are fairly common in many habitats, but are most abundant about decaying plant and animal matter. Outdoors, frequent breeding sites are sewage-contaminated soil, exposed garbage, roadside drains that contain landscape clippings, animal carcasses, rotting vegetables and fruit, and other damp organic materials.

Phorid flies will wander into structures from outdoor garbage cans or damp compost piles where fruits and vegetables are disposed. Trash containers which are not cleaned regularly are another good source for these flies.

In structures, these flies can be found breeding wherever moisture exists around plumbing and drains in bathroom and kitchen areas, garbage containers, garbage disposals, crawl space areas, wall voids, or basements where plumbing leaks provide wet areas supporting mould or fungal growth. These breeding areas are occasionally very difficult to locate.

Other areas to check are where any fruits or vegetables are stored outside of refrigerators or coolers. Also inspect recycling bins, garbage cans, damp mop closets and used rag storage bins, and beneath refrigerators where dust and other organic deposits can be found in damp evaporation pans. When searching for breeding sources, remember that the larva can only survive in decaying organic matter that remains moist.

Occasionally, drain pipes will break under slab floors, and phorid flies can breed in immense numbers in the organic debris deposited through the break in the pipe. To determine if phorid flies are exiting through cracks in a floor or from a drain, place pieces of masking tape over the crack or the drain opening. Leave space between the strips of tape to allow air movement for the flies to follow. If flies are utilizing these openings to exit breeding areas, the adults will often become trapped on the tape. Another method is to invert a clear glass bowl over suspected drains, or cover most of a slab crack with tape, leaving only a limited area for exit, and covering that exit area with the glass bowl. If breeding is occurring beneath these areas, flies will appear on the underside of the bowl, or become attached to the tape covering the crack.

In commercial structures, tiny amounts of organic debris are often found where the legs or feet of equipment touch the floor. Restaurants, bakeries and food processing facilities frequently use water hoses to wash the floors. Water under pressure can force food debris and moisture into the cracks and crevices

where it remains moist, ferments, and starts breeding sites. These breeding sites can harbor thousands of fly larvae. All small cracks and crevices at floor level need to be inspected and thoroughly cleaned. Use a small spatula or knife to scrape any debris from inside the cracks and crevices and inspect closely for live larvae. It is recommended that cracks and crevices in floors be repaired to prevent potential breeding sites. Floor drains within these establishments are also favoured breeding sites. Cleaners that dissolve the organic build-up above water traps in drains are effective in removing the breeding source when used regularly.

Flies are not always breeding in the areas where they are observed. Adult females will often fly to light, or actively seek out other breeding sites within a structure. Phorid flies easily follow air currents and may have several breeding places in any structure.

Fly trapping products that utilize a sticky surface may be effective in determining areas of infestation. When properly placed, traps with visibly greater numbers of flies will help identify the areas of higher adult activity which can help locate their possible breeding sites. Continue to search carefully for additional breeding sites until all have been located.

Pesticides applied as space sprays will eliminate the adults, but will not abate the infestation. Whenever using pesticides, always read the label carefully and follow directions. The only effective, long-lasting method of managing this fly is to eliminate all observed as well as potential breeding sites through the use of thorough sanitation and moisture control.