

GYMPIE VETERINARY SERVICES

ABN: 16 069 376 370



QUEENSLAND ITCH IN HORSES

“Queensland Itch”, or Q itch (known as “Sweet Itch” in Europe and America) is an insect bite allergy specifically caused by “midges” (Culicoides species).

What are midges?

A midge is a tiny 1.4mm wingspan fly, which is hard to see, and it is the female which causes the problem. After fertilization, the female midge needs a feed of blood for her eggs to fully develop, and will often swarm and bite in large numbers. It is their saliva which the horse develops an allergy to, which makes their skin very itchy.

When do they bite? Where do they live?

The midges swarm at *dusk and dawn*, and generally live in a wet, humid environment. This can be near water, in undergrowth, long grass, or under the canopies of shady trees. They occur less on exposed windy hills. Midges hate wind, and hot dry conditions, and they can usually only fly a short distance in still conditions.

Horses are therefore at greatest risk of being bitten at *dawn and dusk, or very overcast days*, and if they graze close to where midges like to live.

When does it occur, and what horses are affected?

Q itch is usually a seasonal problem, occurring during the wet season in the tropics and subtropics between the months of October and April, and it appears to be more common in darker coloured horses, like bays and greys. We often see it in horses that have arrived from southern Australia.

What are the signs?

The typical signs of Queensland itch are:

1. An itchy horse (horses will look for and find all sorts of places to rub their itch).
2. Rub sores and hair loss around its face, ears, neck, along the top of its back and base of tail.
3. Some horses have rub sores along their flank, and in severe cases they can have sores under their belly, but this is less common.
4. Wounds – some horses create wounds while scratching their itch on wire or tin.
5. Puncture/abscesses – some horses get splinters causing abscesses or puncture wounds, like on the side of their face.
6. Swollen/thickened skin – after long period of skin inflammation, the skin will become thickened and folded.
7. Pigment loss/change – chronically inflamed skin will develop pigment changes.

Note that the actual bites are difficult to see – if your horse has visible bites, and they are on their legs or lower trunk, it is probably not due to midges – it may be due to March flies, or other larger biting insects.

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HOW CAN WE PREVENT OR TREAT QUEENSLAND ITCH?

If a horse has Q itch, the principles of treatment and preventing it occurring further are generally divided into 2 principles:

Principle 1. STOP THE MIDGES FROM BITING THE HORSE

1. Move the horse to where midges aren't – a windy hill where there is short dry grass, preferably in Victoria!
2. Rug your horse – there are many rugs available designed specifically for Q itch horses, but beware –if you put a rug on a horse that is already itchy, you may have a trashed rug in a short period of time. It is wiser to start rugging prior to the risk season, before the horse is itchy, so the rugging is a preventative.
3. Stable your horse from one hour before dusk to one after dawn. If this is an enclosed stable, away from where midges would live, you will reduce your risk greatly.
4. Apply insect repellent-there are many insect repellants available, both commercial and home made – the fact that there are so many suggests that no single one works every time. The key to using an insect repellent in ensuring it is applied regularly (ie once or twice daily), especially if the horse is standing out in the rain, which often happens in the wet season. Oil based repellants seemed to have an added affect, as midges don't seem to like oily skin.
5. Diet – there are several feed additives which anecdotally seem to help repel insects – sulphur (yellow powder), garlic, cider vinegar, and thiamine at high doses.

Principle 2 MODIFY THE HORSES REACTION TO MIDGES

1. Diet – Omega 3 oils added to feed will modify the chemicals in the blood which promote itch, and reduce the itchiness induced by the insects. This includes fish oil, commercial Omega 3 combinations, or flaxseed oil. Raw flaxseed (Linseed) can also be used.
2. Vitamin B1 – dietary thiamine has been shown in human studies, and anecdotally in horses, to modify reaction to midge bites, and possibly also repel midges. Brewer's yeast has been used in horses, but may not have enough concentration of thiamine to have noticeable effect in some horses. Doses in the range of 1-1.5g of thiamine once or twice daily for a typical 400kg horse may be required to adequately reduce the itch response. Commercial products tend to have 20-30 times the amount of thiamine as Brewer's Yeast, and therefore would be more likely to be more cost effective. It may require 1-2 weeks treatment before an effect in severe cases.
3. Medications to suppress the immune system – these are Prednisalone or Dexamethasone, are prescription only, can have possible undesirable side affects, and therefore should only be used with caution and after a detailed Veterinary examination. They have injection, oral powder, and topical cream formulations, and the topical cream has the least likelihood of causing side affects.
4. There are a various amount of Homeopathic and Naturopathic remedies, which are available, but have not proven to be effective in most instances.

Principle 3 REDUCE ITCHINESS FROM SORES

The sores resulting from self trauma (ie scratching) will themselves become itchy, and due to the disruption of the skin's local immune system, some bacteria and yeast on the skin can cause the skin to become infected, which can perpetuate the irritation and itch. Therefore, treating sores with antiseptic treatments like Quit Itch or Iovone scrub, plus some antibiotic creams, can help to heal the sores and prevent further itch.

Whatever combination of the above is used, the key to success is **VIGILANCE** and **PERSISTENCE**.

Failure of treatment usually happens when the treatment is not used consistently, or when people give up too soon.

For any specific information and a guide on how to treat your horse, don't hesitate to organize a consultation and examination.

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