

Use of Herbs in Competition Horses

By James Hart, February 2004

Can herbs help at the races and in Dressage, Showjumping and Eventing competitions? If you study a veterinary text from a hundred years ago you will find it full of references to herbs. Modern science has come a long way and we now have a fabulous array of drugs including anthelmintics, antibiotics, anti-inflammatories and steroids. In the post war period these drugs were hailed as the answer to all our problems. In many ways they were, but it also appears that we may have thrown out all of the old ways with a little too much enthusiasm. We are now finding that highly refined or synthesised single compound drugs can cause quite severe side effects, allow opportunistic fungal infections and gut imbalance. Antibiotics and anthelmintics are becoming less effective as the pathogens evolve to tolerate them.

Perhaps we've thrown the baby out with the bathwater?

Modern science has also been applied to herbal medicine and even though it may be thought of as old fashioned it is as relevant today as it was a thousand years ago.

The application of modern scientific method to herbal medicine has resulted in more accurate knowledge of the actions of herbs, better and more accurate dosing, better efficacy and higher quality extracts.

The range of plants now available to the herbalist through modern communication is wider than ever. In our own practice we use herbs from Europe, North America, South America, Africa and China to supplement what can not be grown locally.

Using modern manufacturing techniques the extracts are of higher and more consistent quality which mean that we can reliably predict the actions of the herbs we use.

Whilst the arsenal of modern drugs are without doubt efficient and usually highly specific, herbs go a long way to filling some of the gaps and come without some of the disadvantages of chemical drugs. The most obvious is the general lack of side effects but it is important not to forget that herbs also offer some actions that are not covered by modern drugs. The most obvious are the immunostimulating herbs and those with antiviral activity. In many cases these herbs can be used in conjunction with drug therapy with very effective results.

If it's natural does it swab?

There is a common misconception that if something is "natural" it won't swab. Don't be fooled, caffeine is a natural extract of the coffee bean and it swabs. Some herbs do swab so ask the manufacturer if it has been tested. There are several products on the market that contain Valerian. The test to detect this herb has been recently developed and it is now treated as a banned substance. We have the FEI to thank for that. Valerian is a fabulous calming herb and it still has a real place in training but can not be used in competition or racing or other competitions.

Other herbs which may swab include Crampbark (valerianic acid), Willow and Meadowsweet (salicylic acid - aspirin). Make sure you read the label of any herbal products you use. You are ultimately responsible for what you put in your horse's mouth. Most manufacturers list all the ingredients but there are still a few irresponsible ones that do not. This is not acceptable practice.

The "natural" label raises an interesting question. What is natural? Surely it means unadulterated or unchanged by the manufacturing processes. There are a lot of products on the market that claim to be natural but which actually contain added chemicals.

One of the advantages of ensuring that the products we use really are natural is that in many cases the constituents that we are seeking are more bioavailable in their natural form than as a manufactured product. For example humans can take more advantage of the iron in red meat than they can of the iron in spinach. It is more bioavailable because we are omnivores and our digestive systems have evolved accordingly. Herbivores however can take more advantage of the iron in plant matter. In both cases if you give a synthetic iron supplement most of it will pass through because it is not as bioavailable as the naturally occurring iron. How quickly should herbs work?

Some books, and indeed some manufacturers of herbal products, warn you to wait for three or four weeks before you expect to see any result. In a few cases this will be true but do you really want to wait that long? If you are treating an acute problem you want results as fast as possible. Herbs can achieve this if they are given in the right form. For maximum efficacy the herb's active constituents must be taken out of the plant cells in a form that can be absorbed by the body. This will normally be through the digestive system.

If an animal is fed a dry herb this extraction process takes place in the stomach and gut. This is fine for a few herbs but most are better extracted using alcohol. The chemistry of plant constituents is quite complex but as a general rule most of the actives in medicinal herbs are extracted far more efficiently and completely into alcohol. Alcohol is absorbed into the blood stream very fast achieving a quick effect from the treatment. Devil's Claw is a popular and effective anti-inflammatory which many trainers use. I have used it on myself and felt the effect after about 20 minutes.

What can they be used for?

We have found that the most popular uses of herbs are for their anti inflammatory and calming effects. This is probably because they are effective and if used correctly will not swab. There are however many other areas where they can be of help.

Some mares become difficult to handle due to imbalance in the delicate hormonal system that controls reproduction. Chaste Tree is the herb of choice for female hormonal problems and works just as well in horses as it does in humans.

For years the Chinese have used herbs to enhance performance in sport and other areas. Modern studies show that the correct herbal approach can improve stamina. Schisandra has been shown to increase human endurance and reduce fatigue in racehorses. Research suggests that it improves the efficiency and "biological age" of cells. In a European study a randomised, double-blind, crossover study race horses were given either Schisandra or a placebo 30 min before a 5.6 km race The horses that received Schisandra had lower heart rates and respiratory frequencies, increased plasma glucose and decreased lactate levels. The authors of this study suggested that Schisandra caused lower synthesis of lactate in muscle under anaerobic condition and improve lactate clearance by the liver.

Herbs have a real place in the treatment and training of competition horses. Do not think of them as alternatives to modern drugs or training regimes but rather as another tool in your range to produce that winning formula. Herbal medicine is a large and sometimes complex subject that demands a professional approach. The New Zealand Association of Medical Herbalists sets professional standards for its members so I urge you to seek out and use a qualified herbalist.