Simple equine pregnancy tests measure hormones present in samples of urine, manure or blood.

by MaryAnne Leighton

Conventional pregnancy testing of mares can be a right pain in the-you-know-what. Many mares resent rectal examinations, often expressing their displeasure in a violent manner, and mare owners in remote areas frequently do not have ready access to a vet who can manually determine if their mares are pregnant. For many years, laboratory blood testing has been a valuable tool used by vets to determine pregnancy but newly-developed, accurate, non-invasive and affordable urine and manure tests and a simple strip test using serum from a small blood sample, make pregnancy testing easier and more hassle-free for everyone involved – especially the mares.

**BLOOD TESTS**

**Equine Oestrone Sulphate**

Unlike conventional blood tests that must be sent to a laboratory for analysis, this simple test can be done on-site. A new test strip is a very accurate method for determining pregnancy in mares later than 120 days after breeding and up to very close to their due dates. As pregnancy progresses, a foetus and placenta produce increasing amounts of pregnancy-specific steroids which cross into, and are found in, the mare’s bloodstream. The new test strip detects the presence of these steroids and does not suffer the problem of ‘false-positive’ diagnoses seen with other blood pregnancy tests where mares that have lost their pregnancy are still diagnosed as being in foal. With this test, in the unfortunate event of the death of the foetus, the production of the steroids ceases and concentrations disappear rapidly from the mare’s bloodstream, resulting in an accurate ‘not pregnant’ diagnosis. The test requires a volume of only 0.15 ml of serum (not blood), obtained from a blood sample taken in the usual manner from the mare’s jugular vein. Serum is obtained by spinning the blood in a centrifuge or by allowing the sample to stand for 35-40 minutes in a cool area. It takes only five to twenty minutes for the result to be known once the serum has been separated out from the blood... The test can be performed by yourself if you are trained to take blood from the jugular vein, or it can be performed by your vet.

**URINE TESTS**

Also available in Australia is a simple and inexpensive stick test to determine pregnancy that uses a small sample of mare urine. Again, it is recommended that the test is used 120 or more days after conception. The test is best performed on freshly collected, diluted urine, although urine may be stored for up to forty-eight hours at no more than 4°C.

Serum is obtained from a small blood sample to test for pregnancy at home

You could follow your mare around the paddock, waiting for her to urinate into a saucepan...

...or attach a urine collection device to her day rug...
Horses urinate relatively infrequently, about once every six hours, and if the thought of collecting urine from your mare has you trembling uncontrollably with fear or giggling hysterically, you can relax. It can be tricky catching a mare urinating but there is no real need to wander along behind her with a saucepan in hand, waiting for her to oblige. You could train all your mares to urinate on command or you could rig up a contraption incorporating the inverted top half of a drink bottle held in some fine netting that allows the urine to flow through it into the bottle, and attach the whole thing to your mare’s day rug. Some mare owners tape a sanitary pad below their mare’s vulva and squeeze the urine out but fortunately the urine used in the test does not have to be sterile so the easiest way to collect the amount needed is to place a paper towel on the ground immediately after your mare has urinated, then squeeze the urine into a container.

PREGNANCY TEST USING MANURE

There is also an exciting totally non-invasive pregnancy test that provides an accurate determination of whether a mare is in foal or not, without the expense of a visit by a vet, the taking of blood or patiently waiting for the mare to urinate. A fresh sample of a mare’s manure is collected at least 160 days from ovulation or the known last date of service (or the assumed last date of service in the case of paddock-bred mares), placed in a container provided with a test kit and sent to a laboratory and the result of the test is then available within a few days. The test also works by measuring the amount of oestrone sulphate present in the manure. As mentioned above, the hormone is only present when the mare is carrying a living foal and by 160 days there is enough of the hormone present in manure to determine pregnancy. This is a breakthrough for mare owners but unfortunately the test kit is not yet available in Australia. However, if enough mare owners demand access to it the manufacturer may be encouraged to find a local distributor. Contact www.promarlabs.com