

Excerpts from the study report of the European Equine Centre on the mechanical characteristics of Horse Cover bedding and the Bioprotector contained.



Horse Cover is the result of a year-long study conducted with University of Liege and the European Equine Centre. Numerous tests were performed on the mechanical characteristics of the bedding, and on the Bioprotector.

The Idelux environmental, toxicological and agri-food monitoring and analysis laboratory also tested the compostability of the material.

Results :

Excerpts from the study report of the European Equine Centre on the mechanical characteristics of the bedding and the Bioprotector contained:

HORSE COVER is a very interesting alternative to traditional bedding. Its main advantages are a very high absorption capacity, comfort of use (for the horse and groom), and a smaller volume to be removed.

A given weight of Horse Cover will absorb approximately 1.5 times more than the same weight of wood shavings. If we were to compare the absorption for a given volume, the advantage would clearly be even more obvious.

▶ *Fiderwind is a very clean horse that always urinates in the same place and deposits its droppings within a relatively well-defined area of the stall.*

With straw bedding, he often shows signs of skin allergies. These allergies are not observed with Horse Cover.

The droppings remain more localised on Horse Cover than on wood shavings, which makes for easier cleaning.

Horse Cover doubles in volume as it changes from a compacted to a loose state.

▶ *Symphonie is a mare that is described as being very unclean. She doesn't localise either urine or droppings.*

With straw, despite twice-daily cleaning, the bedding must be completely removed at least once every fortnight as it reaches saturation level. She eats more bedding than an average horse.

Her trial with Horse Cover was very conclusive. The urine absorption capacity of Horse Cover is used to a maximum and allows the bedding to remain clean and comfortable for longer than with wood shavings. Similarly, day-to-day cleanliness is improved with Horse Cover, both from the point of view of dampness, that is much less marked than with wood shavings, and from the point of view of the mixing of droppings and bedding that is also much less marked than with wood shavings.

▶ *Jessi turns and walks a lot in small circles.*

This behaviour normally pushes the bedding (straw or shavings) to the sides of the stall and virtually removes it from the centre, where the concrete becomes exposed. This makes the stall uncomfortable. With Horse Cover, the horse's movements do not remove the bedding from the centre, ensuring that it remains comfortable throughout the day.

A layer 6 to 7 cm thick is sufficient to ensure the horse's comfort. This thickness may seem insufficient until one has walked on the bedding and felt the support it provides. Wood shavings, on the other hand, require a thicker layer to be placed in order to be comfortable, and are more easily moved. The horse will more easily end up in contact with the concrete.

The volume removed was estimated by counting the number of wheelbarrow-loads removed. It is approximately 1/5 less in the case of Horse Cover than for wood shavings.

No horse ate the bedding. There were no signs of appetency.

Using the Bioprotector as an additive to the Horse Cover bedding maintains its technical qualities, while giving a pleasant smell and providing a potential hygienic and insect-repellent effect based on theoretical scientific data.

The perceived impression is that there are fewer flies on the Horse Cover bedding than, on the straw bedding of a similarly managed adjoining stall (cleaned daily, morning and evening)

The smell of the bedding can be described in a number of ways: disinfectant, lemony, fresh, even garlicky

Conclusion of the environmental, toxicological and agri-food monitoring and analysis laboratory compostability study:

- Low heavy metal content (no compost contamination problem)
- Low levels of K_2O , P_2O_5 and MgO
- Neutral pH
- This bedding can be used, as is, as an organic amendment (addition of humus and soil structuring effect) together with a nitrogenous supplement on meadowland, for example. When composted or biomethanised, in a mixture with organic matter, it provides additional carbon that can be missing from the organic matter (such as kitchen waste).

