

- \* Two ways to feed horses: which way will you go?
- \* “Easy feed” technology from Goldengrass.
- \* Financial crisis? – not for Goldengrass users!
- \* Do you know what’s in your grain-feed granule?

## Two ways to feed horses which way will you go?

*It is obvious that the 21st century has remarkably affected everyday horse feeding practices. The traditional “hay + oat” feeding that was present for past centuries is taking a new turn...*

### *The old fashioned way of feeding.*

Some of the horse feed owners are still stuck to the old fashioned way of feeding their pets and sports athletes - hay. Yes, it worked for many centuries and was rather safe and cost effective to the standards of that time. Hay making was the only technology to secure way to provide safe forage and due to its low value or natural oxidization through the winter the horses were additionally fed oats or other “forage quality” grains. As a result of lack of education thousands of horses were led to death in cases of severe poisonings with various toxins, not natural to the horse feeds, improper feeding techniques when breaking the balance of 2% forage of the horse body weight per day. Many cases of poisonings were announced in the media, much more were left unpublished...

The disaster of the “forage quality grains” contained poisoning risk of toxins that were coming from the grains that were “degraded” from human foods chain into “animal forage quality”.

The biggest problem of all up to now, still there is no legal regulation of what level of toxins are maximum allowed into animal feeding chain. Therefore knowing this becomes obvious that most of the horse feed grains and palletized food made from it, lower and average priced ones come from the human chain leftovers and therefore are not always safe to feed.

It also has to be emphasized that grain feedstuffs are not natural food for horses. It is very easy to overdose as horses love their sugar tastes that come of sugar beet pulp and molasses added, which later become the major risk elements in colic, diarrhea and laminitis. It must be clear to everybody that **100% of animal quality grains come from residue of human foodstuffs production, therefore very often animal feeds (based on grains) come with a certain amount of toxin, fungal, other dangerous disease pollution.**

NOTE: GOLDENGRASS products are specially designed, grown, cultivated and packaged to meet the highest standards of animal nutrition and differently from grain feed sector Goldengrass is always of superior quality.

### *The modern options for safe and natural feeding.*

It is almost 20 years now since the “in-bale” technology of fermented feeds started and commercial machinery appeared on the fields in Europe and US. The beginning was hard but in the course of research and development it is now possible to achieve incredible forage preservation quality out of high quality green forage materials like perennial grasses – the main energy source for horses.

GOLDENGRASS for example has reached up to “0.00 %” – zero yeast pollution levels in haylage for horses manufacture. Knowing that none of chemical preservatives or heat treatment techniques was used – natural fermentation only it speaks for itself. Comparing 11 months of grain growing and just 3 months of grass growing before harvesting it goes without saying that much less risks appear in connection with plant diseases like milk dew and fusarium. Therefore no chemical pesticides are needed to protect them and as a natural outcome there are no chemical residues in the product after harvesting.

The process of grass fermentation that meets special GOLDENGRASS ISO 9001 management standards basically is not far different from industrial cheese fermentation where a special type of lactic acid bacteria and enzymes eliminate remaining oxygen and “bad” bacteria to preserve the good of the green grass.

### *The fantastic oxygen protection.*

The equine industry of 21st century has greatly benefited from the petrochemical packaging industry development that has given a possibility to produce a state of art plastic packaging technology to protect the fresh fermented grass forage from oxidization for as long as 12 months. Knowing that every month 10 % of any quality hay value is lost due to oxidization – this is a fantastic achievement. Up to 11 MJ /kg energy levels allow keeping horses in perfect condition, allowing them to train, work and fulfill their natural abilities to the maximum every day of every month. Horses fed quality fermented grasses never suffer from colics if feed is dosed properly and not less than three times a day. Laminitis risks are also minimized as soils where Goldengrass forages grow are well balanced with N, P and K elements.

### *How about botulism?*

There is minimum risk having clostridia in fermented grass if the harvesting process and packaging has been arranged properly. It has been proven that clostridia proliferate in surroundings with not less than 50 % moisture, so in haylage of less than 40 % moisture there is no chance for toxins to appear.

### *Conclusion*

In the multitude of options in today’s equine nutrition there are two options of feeding – old fashioned i.e hay + grains and the modern – high quality fermented grass. The new way is directly designed to suit horses and is not a cocktail of human leftovers. Horses would definitely choose the new one...



# MARKET NEWS

## Comparative Effective cost per kilo of feeding Hay sold in EEC as opposed to Goldengrass

Compound Feed € / kilo		<b>€1,10</b>		
Compound Feed Intake in kg with Hay		<b>4</b>		
Compound Feed Intake in kg with GG		<b>1,5</b>		
Daily Forage Intake for Hay in kg		<b>12</b>		
Daily Forage Intake for GG in kg		<b>8</b>		
Hay per ton		<b>€250,00</b>		
Goldengrass per ton		<b>€550,00</b>		
Kg per Metric Ton		<b>1000</b>		
<b>Hay</b>			<b>Goldengrass</b>	
Cost € / ton (lower quality)	€250,00		Cost € / ton	€550,00
Cost € / kilo	€0,25		Cost € / kilo	€0,55
Shipped weight variations	<b>5%</b>		Shipped weight variations	<b>0%</b>
Effective Cost kg	€0,26		Effective Cost kg	€0,55
Waste	<b>10%</b>		Waste	<b>0%</b>
Effective Cost kg	€0,29		Effective Cost kg	€0,55
Digestibility Value per kg	<b>80%</b>		Digestibility Value per kg	<b>100%</b>
Effective Cost kg	€0,35		Effective Cost kg	€0,55
Compound Feed Intake	4		Compound Feed Intake	1,5
Compound Feed Cost	€4,40		Compound Feed Cost	€1,65
Effective Cost kg Hay	€0,71		Effective Cost kg GG	€0,76
<b>Cost per day per horse</b>	<b>€8,56</b>		<b>Cost per day per horse</b>	<b>€6,05</b>

The hay ration would be less if it is Prime Quality Horse Hay (USA standard) but then the cost would be nearer to EUR375/ton  
Compound feed ration varies GG recommends either none at all and give GG free ration or between 1 to 1.5 kilos per day Average saving per horse per year is 916,15 EUR.

\* figures and prices of feeds are average and are subject to change depending on the country and transport costs.

## Three solutions for different tastes ...



### RYEGRASS TIMOTHY MIX 20kg

Timothy-Ryegrass Mix – For medium level working horses and those after tiring competitions. High fibre, medium protein levels, medium energy product. Horses willingly consume it, because it is rich with carbohydrate. Perennial Ryegrass mowed contains 9,85 % of sugar, 8,67 % of it is found in pasturable grasslands. Therefore Perennial Ryegrass fits for horseage more than any other grass.



### NATURAL MEADOW MIX 20kg

Natural Meadow Mix - natural diet for horses. Rich in micronutrients and vitamins. Possessing heeling herbs and has very nice smell of etheric oils. For medium working resting horses, pet horses and ponies.



### ALFALFA MIX 20kg

Alfalfa Mix - Alfalfa; Timothy; Other. For heavy working horses, showjumpers and racers. High protein and high energy product. Young Alfalfa grass contains 4-6 % of proteins and 30-70 mg/kg of carotene. Alfalfa proteins distinguish for its high biological value, because it contains all irreplaceable amino acids. Alfalfa contains estrogen and stimulating substances, which positively influence reproductive features of animals: semen quality and insemination gets better.

# “Easy feed” technology from GOLDENGRASS.

In the course of development Goldengrass has designed an ideal product suiting best the horse and the owner. You would think it is just grass but one who had to spend a day or two feeding horses and owners who know how wrong portioning of horse feed could be dangerous, appreciate the exact forage dosing importance. When feeding traditional hay it comes in whole length grass plants that normally reach from 35 cm to 50 cm in length. If baled properly this type of grass is very difficult to put on scales and know exactly. Well if you do try to break the grass apart it will take hours to get exact pieces, weigh and portion them especially if you have more than 5 horses to feed. So if you feed 3 times a day as needed, there will hardly be any time left for the groom to ride, train and clean... So you will need another groom? Or you will not care how much feed is given? Both of these decisions will end up too higher risk for your horse's health and your pocket... So what's to be done?

GOLDENGRASS has designed its harvesting machines so that the grass is being cut into pieces from 10cm to 15cm in

length – still not too short so horses can play with when eating but short enough to make it easy to take out when feeding... Feeding GOLDENGRASS grooms spend not more than 1 minute to feed one horse. To feed traditional hay it will at least take 8 minutes per horse for one feeding including taking apart the bale, weighing and cleaning the dust. So if one groom is looking after 5 horses every day, feeding GOLDENGRASS, will save your groom 17.5 hours a month to train, clean and practice or this can be translated into cash:

Say 1 hour is 9.37 EUR (1.500 EUR into hands / month),  
9.30 EUR \* 17.5 hours = 162.75 EUR per month or this is 1.953 EUR saving per year!!!

*Easy feed technology* is not just a time saver – it allows you exactly portion daily feed – in this way controlling feed, labor cost and securing that horses are neither underfed nor overfed.

**Clean, nutritious, cost effective, safe. GOLDENGRASS is the modern way to feed your horse.**

## FORAGE IN TODAY'S EQUINE INDUSTRY

Forage should always be the foundation of every horse and pony's diet, with extra feed added only to balance out nutrients that may be in short supply from the forage.

The benefits of feeding plenty of forage to horses include:

- A source of all-important fibre
- Keeps the hindgut microflora balanced and healthy
- Takes a long time to chew; therefore fills the horse's time, reducing the risk of abnormal behaviour development.
- Allows a normal behaviour repertoire.
- Supports normal digestive system function, reducing the risk of gastric ulcers.
- Maintains a certain level of gut fill, which aids gut function.
- Causes a more natural wearing of the teeth than a concentrate-based diet, especially when fed from ground level

### *Feeding forage*

Stabled horses should ideally have free-choice access to forage (ad lib). Ad lib forage means there is always a little left when the next portion is fed. It is particularly important to feed adequate forage overnight to ensure long periods of fasting are avoided. A horse bedded on shavings and fed one haynet at 7pm, who finishes this by 11pm, may have 9 hours of fasting if he is fed again at 8am the next morning. This is a recipe for gastric ulcer formation and an uncomfortable, grumpy, hungry horse.

In a few cases it may be appropriate for forage to be restricted; these include for racehorses prior to racing and for very greedy horses that eat above 3% of their bodyweight per day given the choice. But in these cases, forage should be given in portions spread out over a period of time, and never in any circumstances less than 1% of their bodyweight per 24 hours e.g. 7.5kg fresh weight of average haylage.

The consumption of forage can be slowed by feeding it in a small holed haynet, which is useful for horses on restricted rations. Ideally horses should be given all feed including forage from ground level because this simulates a natural feeding posture and causes a more even wearing of the teeth.

### *Haylage versus hay*

Forage tends to be preserved in two ways – by cutting and drying as hay, or by cutting, wilting then wrapping or bagging as haylage. The nutrient content of hay and haylage depends on the grass species used, the time of year it is cut and the environmental conditions at the time. Despite this, most haylage is more

nutritious than hay in terms of protein and energy. Haylage tends to contain more micronutrients due to its preservation process – more nutrients are 'sealed in'.

If hay is baled at too high a moisture level, moulding will occur in storage. Research has shown that all hay contains some dust and mould spores, which are a health risk to horses. Horses – especially those stabled - are very susceptible to respiratory irritation from inhaled dust and moulds, which causes increased mucus production and airway constriction. Long term, the irritation and inflammation cycle may lead to the development of allergic airway disease or recurrent airway obstruction (RAO, previously called COPD). All hay should be soaked for half an hour prior to feeding to horses, to reduce airborne particles. Bear in mind that the liquid left over after soaking hay is basically contaminated water that is a stronger pollutant than sewage; therefore it should be disposed of with care.

The haylage preservation process involves the forage being wilted rather than dried, then baled and wrapped or bagged to exclude air. Naturally occurring beneficial bacteria ferment the soluble carbohydrates in the grass, preserving it and creating a palatable, dust-free product that is ideal for feeding to horses. No moulding occurs in well-made haylage after wrapping, so total mould count is very low providing haylage is fed within several days after opening. Nutrient losses from haylage as it wilts are much less than those lost from hay during drying, so the end product is more nutritious. Haylage was developed from silage made primarily for cattle, which is a protein-rich forage that is often low in fibre. Nowadays, haylage made specifically for horses is a more suitable higher fibre, lower protein and higher energy product.

*For more info please contact [info@goldengrass.lt](mailto:info@goldengrass.lt)*

# Please check out our brand new !!! [www.goldengrass.eu](http://www.goldengrass.eu)

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## Do you know what's in your feed granule?

Horse owners who are not nutrition specialists and especially those who love their horses very much put their animals at risk because of not reading or willing to understand what kind of feed they are supplying to their beloved ones. In today's market there are dozens of different mixed (or compound - pelleted) animal feeds that are packed in beautiful package, however very few people actually read what exactly the milled feed pellets are made of. GOLDENGRASS has made a study on what basic horse feed pellets are made of:

The average is as follows: 36% – barley, 37% - sugar beet pulp, 13% - oats, 5% - molasses, 5% - other grains, 4% - different minerals, vitamins and micronutrients

out of these results becomes clear that more than **40% of the pellets i.e. sugar beet pulp and molasses are the products that absolutely not needed in the daily horse diet** and the cost of which would much better would be spent on materials that are beneficial and natural to your horse. Therefore we strongly advise GOLDENGRASS customers not to get hooked on nice labeled bags and make sure that money that is spent on is 100% what you or your horse needs.

*GOLDENGRASS team*

## Feeding practical tips

1. Try to avoid introducing new feed to the horses suddenly. Try to mix a bit of old and a bit of new for a few days.
2. Always make sure that the products are not polluted with molds, yeasts and other admixtures.
3. Make sure that mice and rats have no access to the feeds, especially packed into protecting packaging.
4. Consult with your vet to make the most appropriate diet to your

horse depending on its individual needs.

5. Be aware that there must be not more than 20 % sugars in the forrage you feed as it may lead to serious illness!!

6. Feed not less than 3 times a day when the horses are stabled.

7. Do not forget that forage is the main feed and must make at least 80 % of daily intake of a horse.

