



**Experiences of Penergetic users in Austria and Germany  
with field composting on grassland**  
(Penergetic-k; Penergetic-p and Penergetic-k for Roots, Penergetic-k for Leaves)

User	Products	User observations meadow / pasture
	In use since	
Franz Tabernig 9951 Ainet East Tyrol	2010 Penergetic-g 2011 Penergetic-k,-p,-t	Grass cover has improved very significantly, more even growth; <b>cocksfoot, timothy and especially rye-grasses</b> are returning, up to 30% better yields and improved quality, reference areas were observed
Johann Marko Voelkermarkt Carinthia	2007 Penergetic-g 2010 Penergetic-k,-p,-t	<b>Reduction of weeds</b> , dense, close, fine grass stand, <b>dung rots very quickly, pasture is grazed off very cleanly</b>
Wolfgang Moitzi 8742 Obdach Carinthia	2011 Penergetic-g 2012 Penergetic-k,-t	Grass stand has changed very much for the better, <b>excellent emergence</b> after reseeded. Dense grass stand, <b>buttercup</b> significantly reduced
Herwig Bock 9631 Jening Carinthia	2011 Penergetic-k AquaKat	Reduction of <b>cow parsley</b> ; since water is being vitalised with the AquaKat, the cows conceive more easily and their wombs are in better condition
D. Hohenwarter 9633 Reisach Carinthia	2011 Penergetic-g 2012 Penergetic-k,-p	<b>More red clover, less cow-parsnip</b> , finer, denser grass stand, rich green, <b>increased yield</b>
Georg Wieser, 6353 Going Tyrol	2011 Penergetic-g,-k,-p,-t	<b>Dock is greatly reduced (field composting)</b> , strong clover growth, dock is very well spread out, dense grass cover

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Andreas Fuchs 6353 Going Tyrol	2012 PENERGETIC-g,-k,-p,-t	Reduction of <b>caraway</b> , very strong clover, grass is becoming much finer, does not age as quickly, good yields – differences to reference areas clearly visible
Andreas Burgmann 6363 Westendorf Tyrol	2012 PENERGETIC-g,-k,-p	Lush green, satisfactory yield, <b>cattle grazing cleanly and intensively</b>
Stefan/Andreas Linder Oberndorf Tyrol	2011 PENERGETIC-g,-k,-p,-t	Very significant reduction of dock (field composting), denser grass sward with better bearing capacity, strong clover growth, more yield, greater diversity of species, finer quality
Josef Hirnsberger, 6380 St. Johann Tyrol	2011 PENERGETIC-g,-k AquaKat	Increased yield, <b>good plant stand</b> and good growth, more grasses, finer quality
J. Hechenberger 6373 Jochberg Tyrol	2011 PENERGETIC-g,-k,-p,-t	Dense grass, growing very well on dense, cultivated soil, <b>soil is very lively</b> , cow dung is absorbed into the soil quicker, increased yield
Michael Geiersberger 5441 Abtenau Salzburg	2007 PENERGETIC-g 2010 PENERGETIC-k,-t 2011 PENERGETIC-p	<b>Tall buttercup reduced by up to 50%</b> . Positive changes in the grass stand. More leaf mass. Soil absorbs water better. After prolonged wet periods it is possible to drive across the fields again sooner. <b>Wet patches dry out quicker</b> . Silage and hay dry quicker – changed cellular structure. More and improved forage. Finer topsoil
Johann Braid St. Roman Upper Austria	1997 PENERGETIC-g 2000 PENERGETIC-k,-p,	Fields <b>survive drought periods very well</b> , dense grass stand, yields have been increasing continuously since PENERGETIC has been in use, <b>lively soils</b>
Hubert/Erna Both 6780 Schruns Vorarlberg	1994 PENERGETIC-g, AquaKat 2011 PENERGETIC-k,-p,-t	20-25% yield increase, natural clover growth, dense, very soft grass, <b>great diversity of species</b> , very little dock, cattle are full quicker when feeding, slurry can be spread even in hot weather, driving tracks vanish quickly under new intensive growth

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Ernst Burtscher Sonntag Vorarlberg	1996 Penergetic-g, AquaKat 2005 Penergetic-k,-p,-t	Very dense grass, <b>great diversity of species</b> , high bearing capacity, cattle graze very well, good clover growth, <b>loose soil, high water storage capacity</b>
Julius Tschann 6714 Nueziders Vorarlberg	2012 Penergetic-k,-p,-t AquaKat	<b>Biogas plant in operation for 12 years, since Penergetic is being used strong clover growth, very dense stand, increased yield, greater species diversity, significant reduction of dock (field composting)</b> , better quality, very satisfied
Edwin Wohlgenannt 6844 Altach Vorarlberg	2011 Penergetic-g,-k,-p 2012 Penergetic-t, AquaKat	<b>Significant reduction of buttercup</b> , dense, fine grass stand, increased yield, very good quality, slurry can be spread in hot weather
Bruno Germann, Hoskirch Germany	2012 Penergetic-g,-k,-p, -t AquaKat	<b>Biogas plant for 2 years; danel is becoming finer</b>
Andreas Schleicher Dauchingen Germany	2011 AquaKat 2012 Penergetic-g,-k,-p,-t	Dock growth decreasing to acceptable levels, does not produce as many seeds as before, plants stand more densely, handsome stands, <b>plenty of forage without fertilisation (field composting)</b> , significant decrease in tall buttercup, <b>dung does not burn the grass anymore</b> since Penergetic-t is being added to the animal food
Anton Braun, Achstetten Germany	2006 Penergetic-k, 2011 Penergetic-g,-p,-t	Randall grass is becoming finer, denser, less woody, ages more slowly, <b>reseeding required less frequently on permanent grassland</b> , dock is decreasing. Hay appears “heavier”, better forage quality. Soil becomes <b>darker, finer, livelier</b> with a look of fertile compost. Conventional agents / fertilisers work more effectively, therefore their use can be reduced
Karl Munz Hoskirch Germany	2012 Penergetic-k,-p	No more minimum N-fertilisation required – slightly lower yields but better quality, decrease in rough-stalked meadow grass, <b>density and diversity of grasses increasing</b> , significantly finer grass, gaps are closing, grass <b>regrows very quickly</b> after being cut

<b>Pasture treatment schedule for 2013 – field composting</b>				
	Application with	Product	Amount	Price €
Nutrient mobilisation Activation of soil biology	1. Slurry / manure (spread with water or slurry)	Penergetic-k Penergetic-k for Roots	1.5kg 250ml	30.94 10.84
Nutrient mobilisation Soil biology	2. Spread with slurry (with slurry or water)	Penergetic-k Penergetic-k for Roots	300g 100ml	6.18 4.34
Increased photosynthesis, Root formation	3. Spread with slurry (with slurry or water)	Penergetic-p Penergetic-p for Leaves	300g 100ml	8.93 4.34
Nutrient mobilisation Soil biology	4. Spread with slurry (with slurry or water)	Penergetic-k Penergetic-k for Roots	300g 100ml	6.18 4.34
Field composting	Last slurry application	Penergetic-k	0.5kg	10.31
Total requirement – Depending on soil type and structure		2.6kg, 450ml Penergetic-k 300g, 100ml Penergetic-p	net approx.	86.40

Penergetic activates, supports and stabilises vital processes.

Penergetic makes nutrients more easily available, improves the soil's water storage capacity, increases humus formation and therefore soil fertility. This leads to high yielding, high performing fields.

The objective is a large quantity of high-quality forage. Penergetic promotes interactive processes between slurry-soil-plant-animal.

In other words: reduced costs – improved quality – increased soil fertility – a recipe for success!

<b>Penergetic-g Improves slurry</b>	<b>Penergetic-k Activates soil biology</b>	<b>Penergetic-p Strengthens plants</b>	<b>Penergetic-t Optimises feed conversion</b>
Base material: calcium carbonate	Base material: bentonite	Base material: bentonite & molasses	Base material: calcium carbonate

**Additional information:**

[www.weber-agrartechnik.at](http://www.weber-agrartechnik.at); [www.penergetic.com](http://www.penergetic.com)



Some photographs



Biogas-slurry & results of field composting







Grass growing nicely over dock.

