



Test design

General information –  
Data collection –



### General rules for trials

- If machinery (e.g. sprayer, tanks etc.) is used for the trial, use this equipment first for the control field and then for the penergetic field. After the application, clean the machinery. It takes up to several weeks before the effect of the penergetic information disappears from the machinery.
- If equipment is used (test tubes, watering cans, fertilizer containers, etc.) it is essential to use separate instruments throughout the experiment and mark them accordingly.
- For compost heaps, the control and test heaps should be 5 – 10 meters apart.
- In the case of sloping sites, place the penergetic heap at the bottom of the plot, otherwise rain, for example, flushes the penergetic k down on to the control heap.
- Attention must be paid in combination with the AquaKat. Water or metal can transmit the effects over long distances.

### Barn trials

- The barn must first be cleaned, then penergetic k must be applied to the barn floor and walls after mucking out. The application can be dry or liquid. Repeat the procedure after each bedding.

### Compost trials

- The dry product is best mixed with sand or sawdust and penergetic k evenly applied to the compost layers. For liquid application, dissolve the penergetic k with water and, if the dung heap is not to be moved, pierce several holes into the pile and pour in penergetic k.

### Adjustment of the quantities of fertilizers and pesticides

The penergetic products act as optimizers. If mineral fertilizers (NPK) or other biological or chemical products are used, they should be reduced by ~15 to 20 %.

### Setting up and documenting a measurement

- A photo documentation from the start until the end of the trial period (high quality images) is mandatory.
- Use previous documentation (evaluations/analyses without penergetic products) to enable a clear comparison.
- If necessary, carry out compost analysis to determine the effect on the compost.
- Description of the initial situation and the objective.
- Use the data collection form below.

## Data collection: barn and compost

### General data

Penergetic consultant			
Customer		Year of trial	
Farm location: country, city			
Using penergetic products for the first time?	<input type="checkbox"/> Yes	<input type="checkbox"/> No, for _____ years	
Objective of the trial			

### Barn / bedding trial

Farm system			
Barn size			
Animal species			





Composition of the bedding			
Cleaned barn	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

	Stocking rate	Starting date	End date	Productivity (kg per ha)
Control				
penergetic test				

## Analysis

Feed composition	<input type="checkbox"/> Yes (please attach copy)	<input type="checkbox"/> No
Compost analysis	<input type="checkbox"/> Yes (please attach copy)	<input type="checkbox"/> No

## Penergetic products

	Art. no.	Molasses or powder	Dosage / m <sup>2</sup>	Interval
Penergetic k		<input type="checkbox"/> 		
		<input type="checkbox"/> 		
Other penergetic products		<input type="checkbox"/> 		
		<input type="checkbox"/> 		

## Other information

Irrigation (flow rate / h, etc.)	
	N/A

## Compost trial





Farm system	
Amount of compost	
Composition of compost	<input type="checkbox"/> dry manure bedding <input type="checkbox"/> liquid manure <input type="checkbox"/> barn
	<input type="checkbox"/> straw branches <input type="checkbox"/> kitchen waste <input type="checkbox"/>
	<input type="checkbox"/> bio waste <input type="checkbox"/> garden waste <input type="checkbox"/> animal waste
	<input type="checkbox"/> other:
C:N Ratio	

	Volume	Start date	End date	Quality?
Control				
penergetic test				

### Analysis

Compost analysis	<input type="checkbox"/> Yes (please add a copy)	<input type="checkbox"/> No
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### Penergetic products

	Art. no.	Molasses or powder	Dosage / m <sup>3</sup>	Interval
Penergetic k		<input type="checkbox"/> 		
		<input type="checkbox"/> 		
Other penergetic products		<input type="checkbox"/> 		
		<input type="checkbox"/> 		

### Other information

Irrigation (amount, flow rate / h, etc.)	
	N/A

### Observed benefit / effect

Smell (barn / compost), behavior of the animals, health of animals (weight comparison), bedding quality, usability of the treated compost, quality improvement of the final product, field observation of the improved compost

Observation 1:		
Observation 2:		
Observation 3:		
Observation 4:		

Quote customer	

Conclusion and further comments (please do not feel restricted by the amount of space provided, add extra sheets as required):

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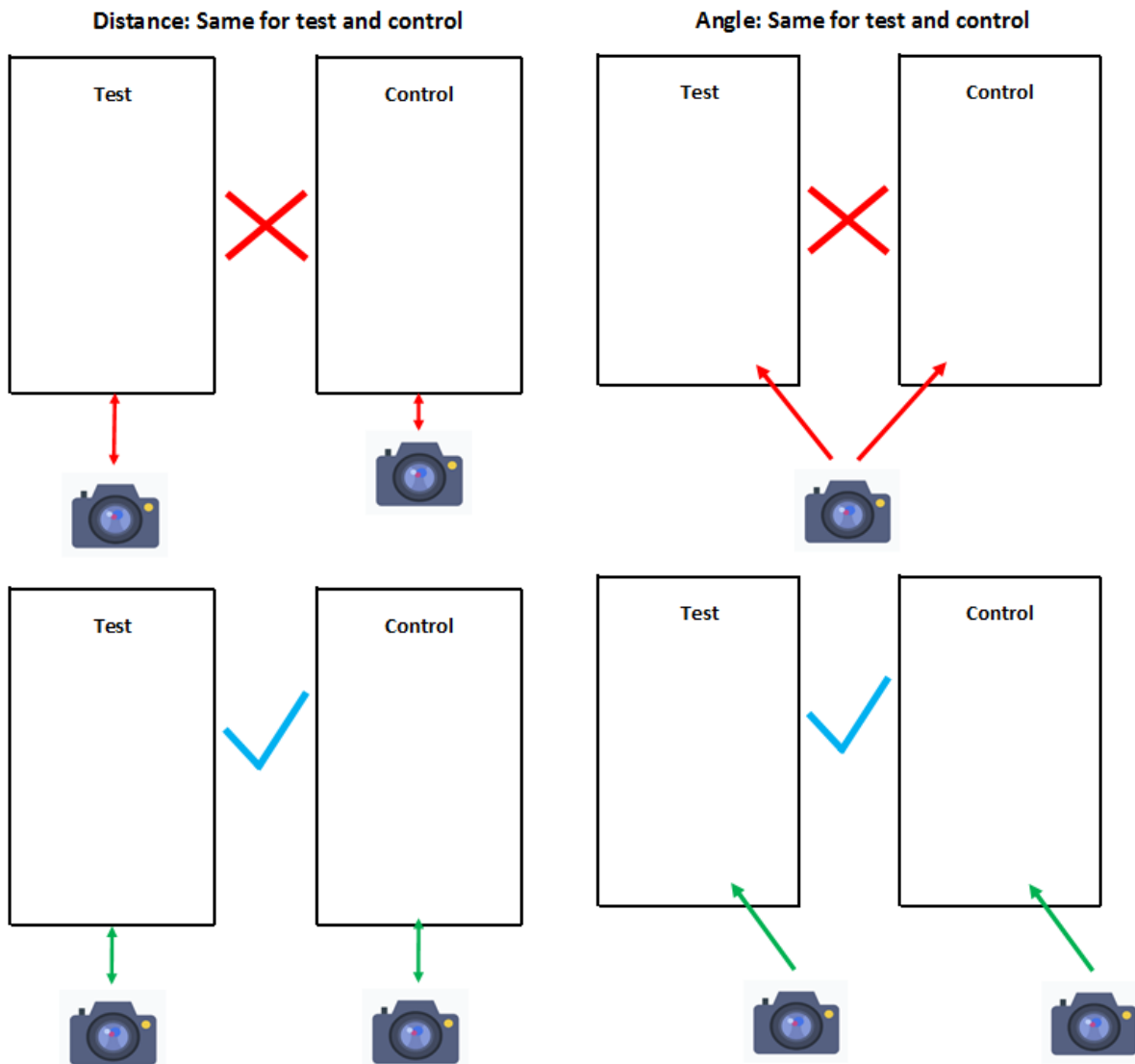
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### Images and illustrations

Please upload at least 4 images according to the following instructions.



**Height: use reference objects or people (same)**

