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A new method of environmental enrichment in piglet rearing: elevated platform with different enrichment materials

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Introduction



- ⇒ **increasing demands on animal welfare**
- ⇒ **needs of weaned piglets: social contact, activity, resting, play...**
- ⇒ **i. E. space allowance and enrichment**
- ⇒ **problem: existing barns with restricted structures, low investment possibilities**

Is an elevated platform with enrichment materials in the pen a practical contribution to improve animal welfare of weaned piglets?

Platform in combination with enrichment material

- ⇒ more space per animal
- ⇒ enriched environment
- ⇒ enabling functional areas for sleeping, elimination, activity



Six rounds on the TiHo research farm

- ⇒ group of 40 piglets (test), 4x10 piglets (control)
- ⇒ housing in with 35 days of age, ca. 10 kg
- ⇒ 33 days in pen

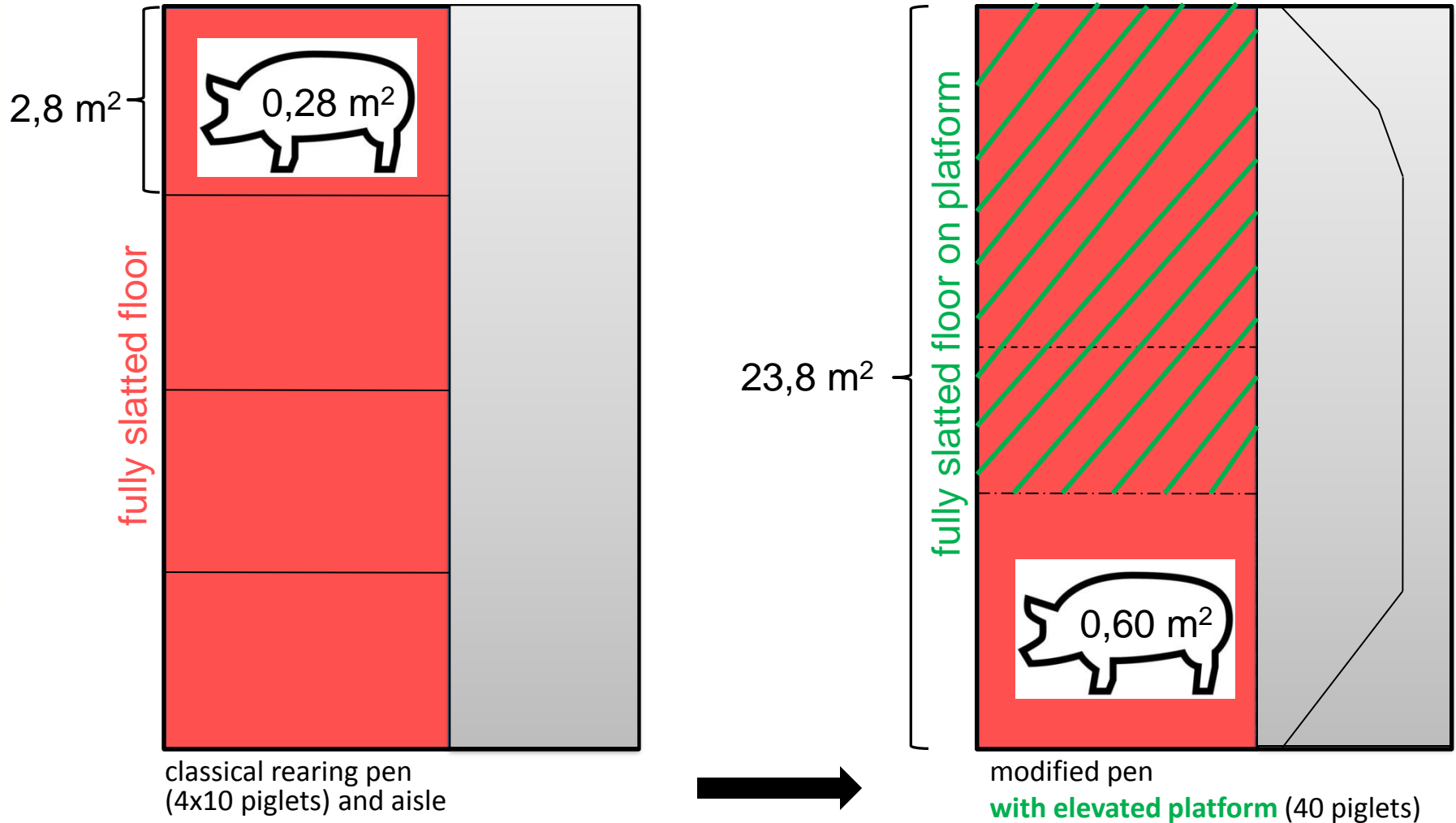


control

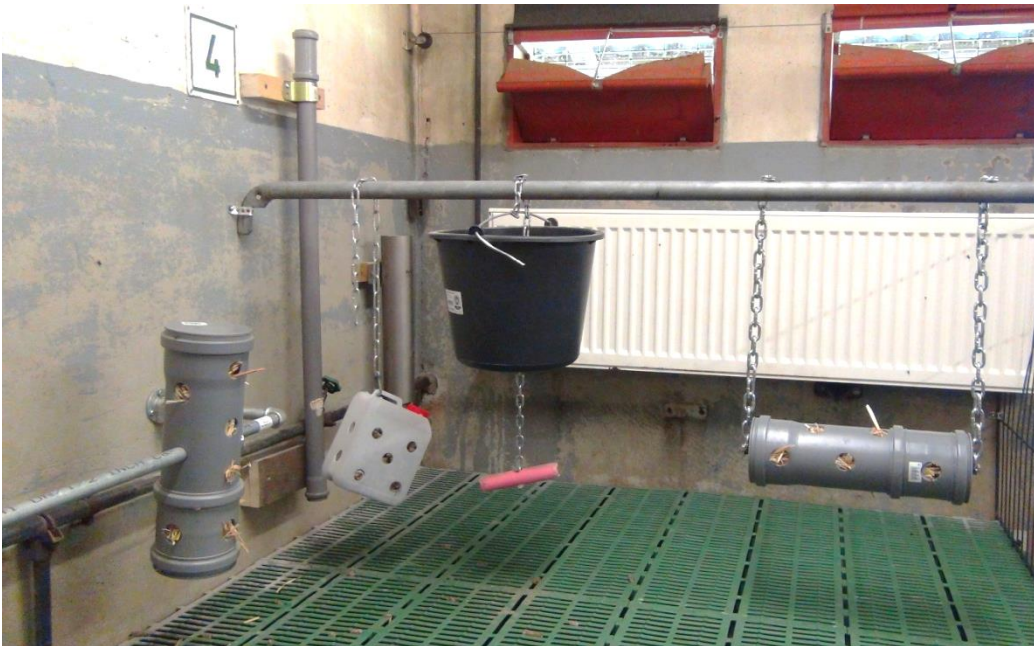


test

Material and Methods



Nine different enrichment materials, for instance:



canister bucket

pipe swing

playing rail



lifting pipe

Mik-toy®



Methods

- ⇒ video analysis: recording of 2 days/week, standing and lying piglets in four areas, playing piglets (morning, afternoon, night)
- ⇒ examination and lesion bonitur/scoring: cumulative index

more knowledge on

- ⇒ use of different functional areas
- ⇒ behaviour in the different areas
- ⇒ use of enrichment materials
- ⇒ possible effects

practical method for improved animal welfare?

m ears and tail max. 9



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Results



Results

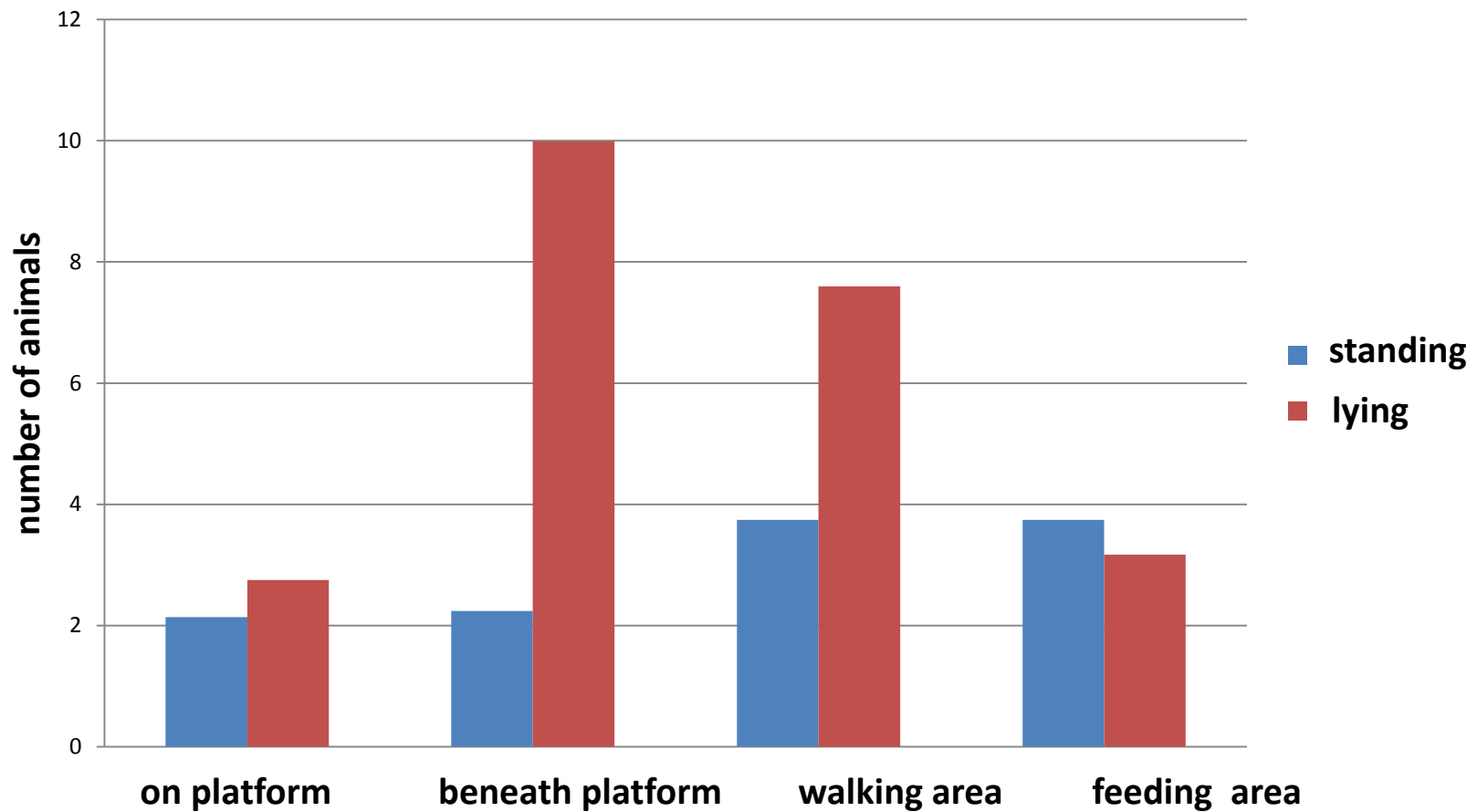


28. day



Video analysis (3 observation periods in 24 h)

Behaviour in four different functional areas



Use of platform in the course of the day

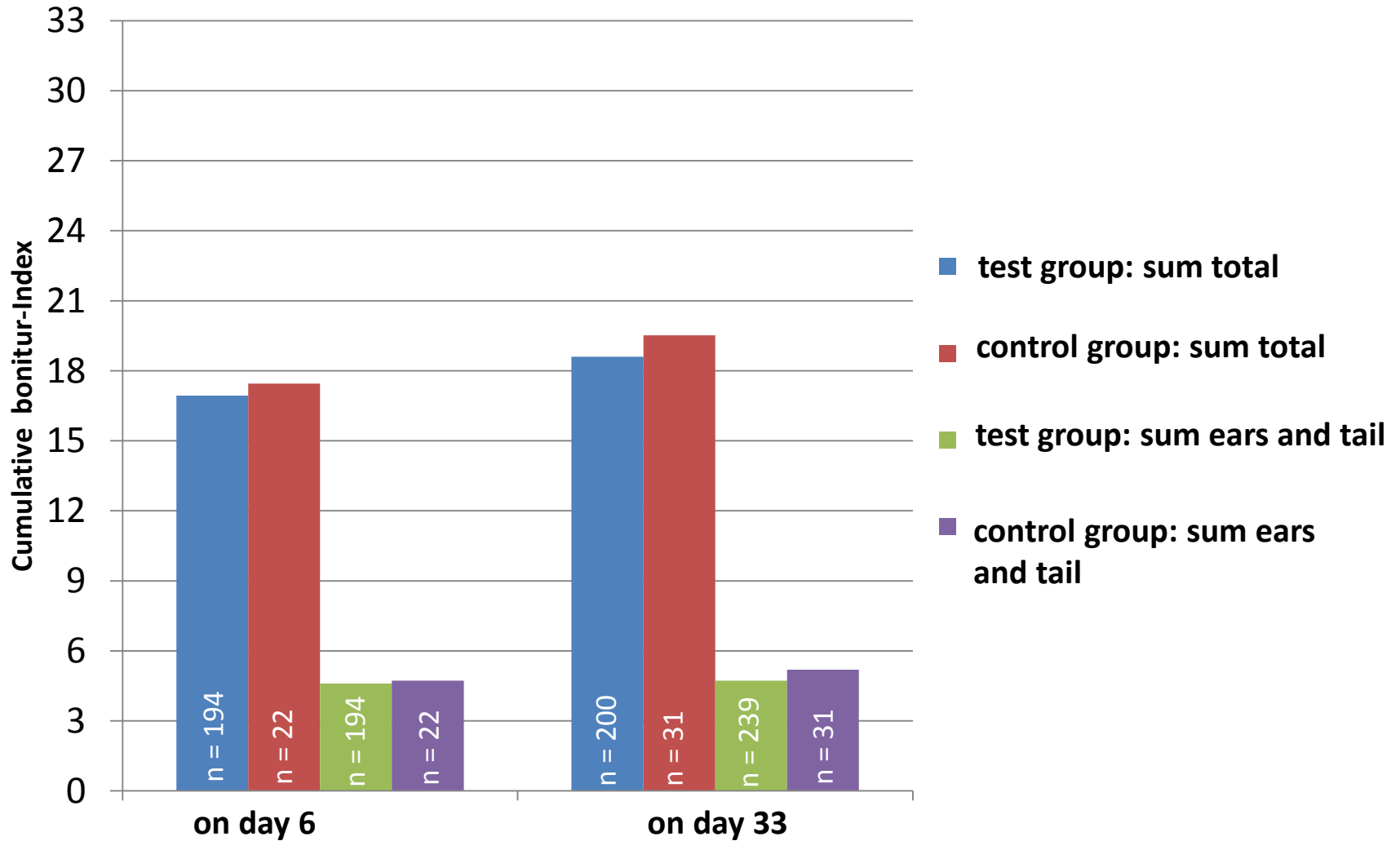
| number of piglets... | morning | afternoon | night | p |
|------------------------------|---------|-----------|-------|--------|
| ...on platform | 4.9 | 7.2 | 0.6 | < 0.05 |
| ...under platform | 18.5 | 12.6 | 21.6 | < 0.05 |
| ...using enrichment material | 1.5 | 0.7 | 0 | |



Results



Bonitur of lesions (integument)



Conclusions



| critterion | conclusion |
|--|---|
| | - different areas were used over whole rearing period |
| <p>⇒ practical method to increase space allowance and to create different functional areas</p> <p>⇒ next steps: tests on farm, assisted by scientific monitoring</p> | |
| weight gain | difference between test and control group |
| climate | - platform without negative effects on ammonia and other parameters |

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Thanks for your attention!



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