



Labour time required for piglet castration with isoflurane anaesthesia

S. Weber¹, G. Daş¹, K.H. Waldmann², M. Gauly¹

¹Department of Animal Science, University of Göttingen, Germany

²Clinic for Swine and Small Ruminants, University of Veterinary Medicine Hannover, Germany
Contact: gdas@gwdg.de

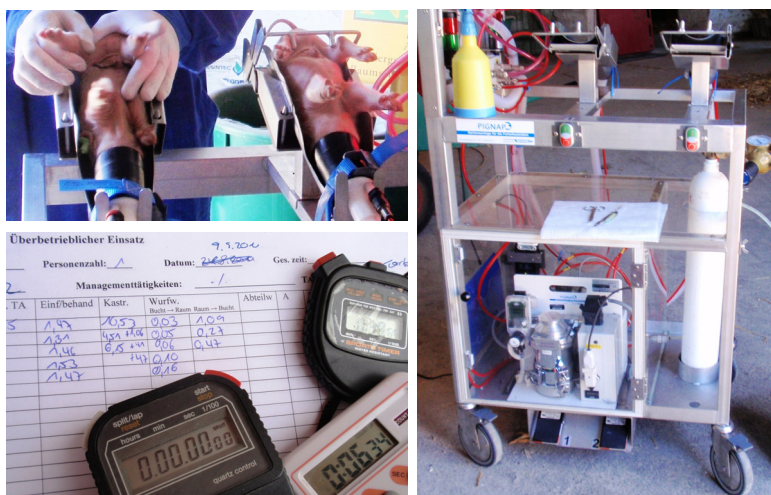


Objective

To investigate the amount and components of labour time for isoflurane anaesthesia performed with stationary and shared devices

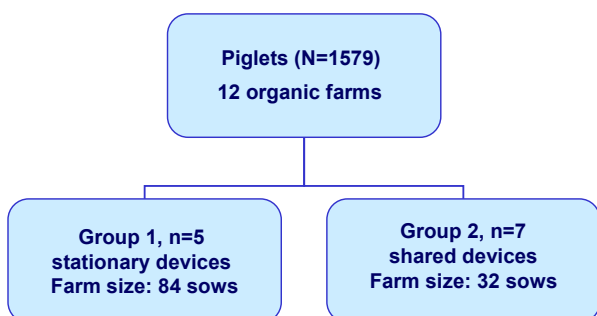
Background

- Isoflurane anaesthesia combined with an analgesic represents a welfare-friendly method for piglet castration
- Equipped inhaler device is required, which is unprofitable for small farms
- Is sharing a device among several farms an economical option?



Anaesthetic device (Pignap Pro, Agrocomp[®]) and labour time measurements

Material and methods



- Anaesthesia with isoflurane, castration
- 4 farm visits per farm
- Labour time recording:
 - Machine set-up, anaesthesia and castration by practitioner
 - Preparation, collection and transport of piglets by farmer

Conclusion

Costs arising from increased labour time of the shared use of the device are marginal

High expenses originating from the purchase of an inhaler device are shared among farms

Results

- Labour time required for the complete process was increased (Table 1)
- Elevated time spent for preparation, castration and packing when sharing a device

Table: Labour time (s / piglet) for single process steps and complete process (LSM ± SE)

Process step	Use of anaesthetic device		P, ≤
	Stationary	Shared	
Preparation	23 ± 10.2	52 ± 8.6	0.055
Collection	51 ± 16.0	50 ± 13.9	0.972
Castration	74 ± 4.1 ^a	88 ± 3.8 ^b	0.026
Transport	14 ± 1.5	13 ± 1.4	0.823
Packing	26 ± 8.2 ^a	60 ± 7.0 ^b	0.010
Complete process	177 ± 21.8 ^a	266 ± 18.8 ^b	0,012

ab: Different letters indicate significant differences (p<0.05)

- No significant differences (P>0.05) for components of total time budgets for stationary or shared use (Fig.) on percentage base
- Cost from time spent by farmer: no considerable difference between the use of stationary (0.26€ per piglet) and shared (0.28€) devices

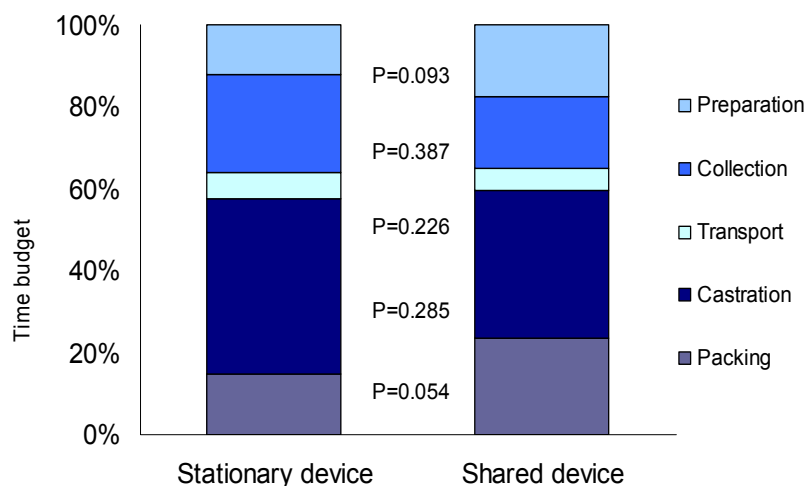


Figure: Components of the time budget; stationary and shared device compared in %