Group suckling in organic sow units

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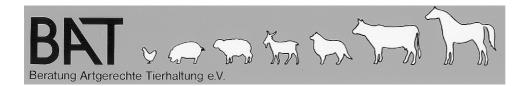


Group housing of lactating sows

- Study on 31 farms in Switzerland, Germany and Austria
- > Aim of the study: description of the status quo of group suckling in organic farms and the identification of success factors on farm level











Group suckling – an animal friendly and economic system

Advantages

- > Natural behavior
- > Less farrowing pens needed
- > Integration in old buildings
- Possible for outdoor climate stable
- efficient use and acceptability of the areas
- Less stress for the piglets during weaning – no grouping
- > More space more activity
- > Higher feed intake

Disadvantages

- > Higher demand in management
- > Difficult to control the animals
- One additional transfer and cleaning
- Increase of weight differences between piglets



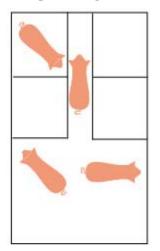
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Group housing of lactating sows

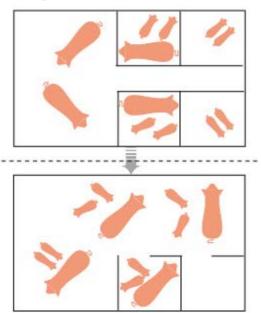
Group housing without changing the stable

Combination of single and group housing

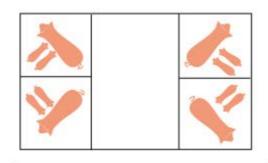
Single system

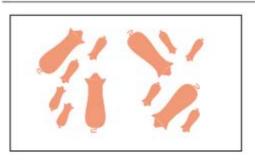


Modified single system



Two stables







Methods: Success factors

> Health of sows and piglets

- > homogeneity in piglet's weight at weaning
- > normal behavior of the sows at handling
- > productivity data (amount of weaned piglets per litter, losses in farrowing and group housing pen)



Methods: Evaluation of farms

Target values were defined in the areas

- > housing
- > management
- > feeding
- > animal health
- > human-animal relationship
- > productivity



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Methods: Development of scoring system

Farm	Pen design	Pigletnest	Outdoor run	Feeding	Manage- ment	Animal Health	Productivit iy	Human- Animal Relation	Skin lesions, BCS, Behaviour
1	1	2	2	1	1	2	2	1	2
2	1	1	1	2	2	2	2	2	2
3	1	3	2	2		2		2	2
4	2	2	1	1	2	3	2	3	2
5	1	3	3	2	2	2	3	3	2
6	3	3	2	2	1	3	2	2	1
7	2	3	3	2	3	2	2	3	2
8	2	3	2	2	3	2	3	3	2
9	1	1	2	3	3	3	3	2	2
10	2	3	2	3	3	2	3	-	1

1 =good

2 = mid

3 = bad



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Results: Housing

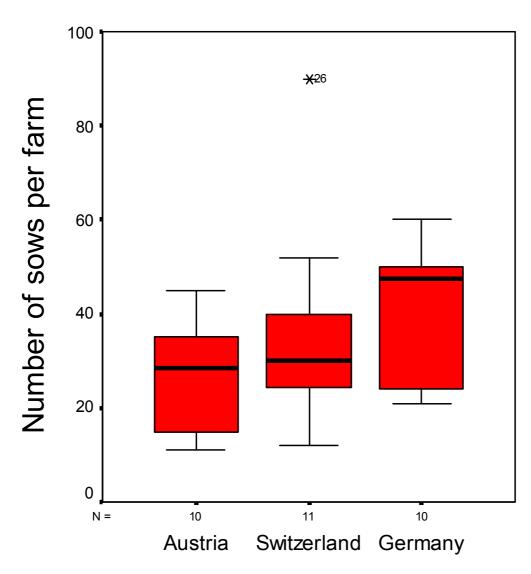


7 outdoor climate, 24 closed6 new stables, 25 modified stables





Results: Number of sows per farm



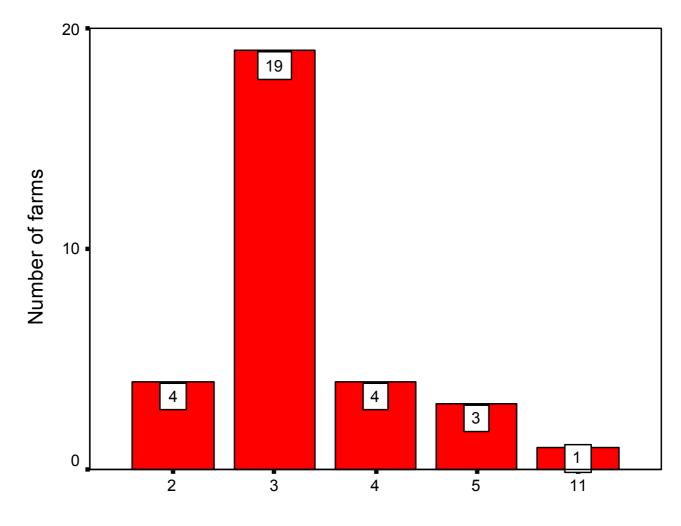
A: 27 (11 – 45)

CH: 36(12-90)

D: 41 (21 – 60)



Results: Number of sows per unit







Results: Management

- > Keeping the planned group size
 - > six farms > 75 % of the groups

- > Keeping a low age difference between litters
 - > less than eight days in 84 % of all groups

Preference for low age difference is more important than to keep the planned group size



Results: Animal health

After weaning evaluation of: injuries at neck, body and teats, wounds at vulva, damage of extremities

- > Relatively little postural damages
- > Head-body-injuries correlate with the group-size
- Injuries of teats are not correlated with the size of the group and amount of piglets



Results: Human-Animal relationship

- > Approach test: reaction of sows and piglets to an unfamiliar person
- > Handling test: behavior of the stockperson

- > More approach than retreat, flight or aggression
- > Sows were little afraid in group housing systems





Results: Body Condition Score and behavior

Evaluation of 192 sows

- > 74 % in good nutritional condition
- > 18 % were considered skinny
- > 8 % were considered fat

- Problem of thin sows after lactation: more influence from feeding than from the lactating period
- Only 18 of 203 sows (in 12 farms) behaved anxiously or aggressively



Results: Productivity

> 9,1 weaned piglets per sow and litter (5,8 – 11,5)

> Losses in the farrowing pen 15,6 %

> Losses in the group housing 3,9 %



Final evaluation

- > Most critical housing factors:
 - > Piglet nest
 - > Feeding

Factor	Good	Mid	Bad
Pen design	9	17	5
Piglet nest	4	8	19
Outdoor run	6	18	7
Feeding	4	10	17
Management	8	11	8



Final evaluation

- None of the farms provided optimal conditions in housing, feeding and management
- None of the farms was considered successful in all: productivity, animal health and human animal relationship
- No plausible correlations between success criteria and farm specific production conditions could be found



Recommendation: Management factors for successful group housing

Max. age difference between the piglets is 5 days

Min. piglet age for the day of grouping is 10 days

> Group size of 3 – 4 sows



Conclusion

- > Group housing is an alternative system to single housing
- Group suckling has advantages in animal welfare and economic aspects

But

- > To ensure success the basic requirements in
 - > Housing
 - > Feeding
 - > Management
 - > Veterinary treatment
 - must be adhered to.



Thank you for your attention!





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Beispiel Bewertungstabelle GS-Bucht

				Bewertung		
Ort/Was	Parameter	Anforderung	Begründung	Gut	Mittel	Schlecht
GS-Bucht	Gruppengröβe	2 – 4 Sauen pro Gruppe	Häufigste in der Praxis anzutreffende Gruppengröβe; stallbaulich und bezüglich Umtriebsplanung gut realisierbar	2 -4	5 – 7	>7
	Liegefläche pro Sau in m ² > 3,5 m ²		Reduziert Ferkelerdrücken: Jede Sau muss ungehindert liegen können und synchrones Säugen auf der Liegefläche muss möglich sein	> 3,5	3,4 - 2,5	< 2,4
	Einstreumaterial und –höhe	Stroh 5-10 cm hoch	Tierkomfort; Wühlmaterial, Wärmespeicher	Stroh, 5 – 10 cm		bodendeck end; Tiefstreu
Ferkelnest	Grundfläche pro Ferkel in m ²	>0,1	Ausreichend Platz für Ferkel im Kleinklimabereich	>0,1	0,1 - 0,08	< 0,08
	Zugfreiheit Keine Zugluft durch Öffnungen (Spalten) in Deckel und Wänden		Ferkelgesundheit	Ja		Nein
	Wärmequelle	Fußboden- oder Deckelheizung	Gleichmäßige Wärmeverteilung im Ferkelnest	Fußboden-, Deckelheizu ng	Ferkellampe	Keine Wärmezufu hr

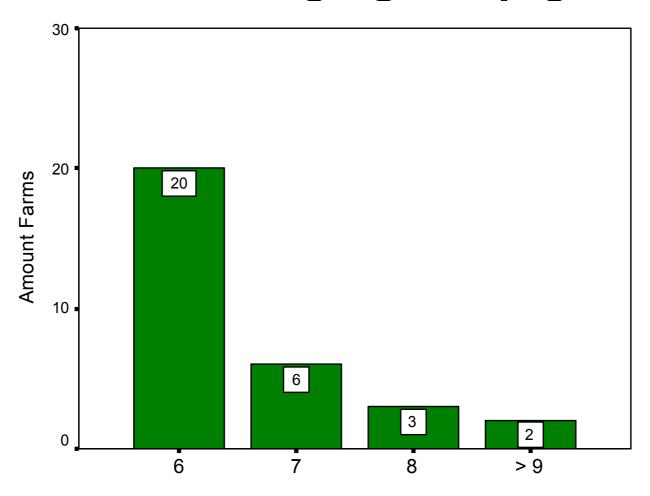
Idea of group suckling

- > Natural behaviour
- > Reduction of the weaning stress
- > Economically interesting (stable, work schedule)

> Animal friendly and economic system



Results: Weaning age of piglets



Weaning Age of Piglets in Weeks



Methods: Data collection

Researcher

- > Questionnaire for farm data, management, human-animal relationship
- Data sheet for housing, animal health, BCS, human-animal relationship
- > Arrangement drawing of the group suckling pen

<u>Farmer</u>

> Productivity data

Both

> Piglet weight



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Final evaluation

Success criteria	Good	Mid	Bad	Missing
Productivity	$\left(\begin{array}{c}1\end{array}\right)$	13	13	4
Animal Health		14	16	1
Skin lesions, BCS, behaviour	6	20	4	1
Human animal relationship	6	13	5	7

