



 **World
Rabbit
Congress**
2016
Qingdao, China



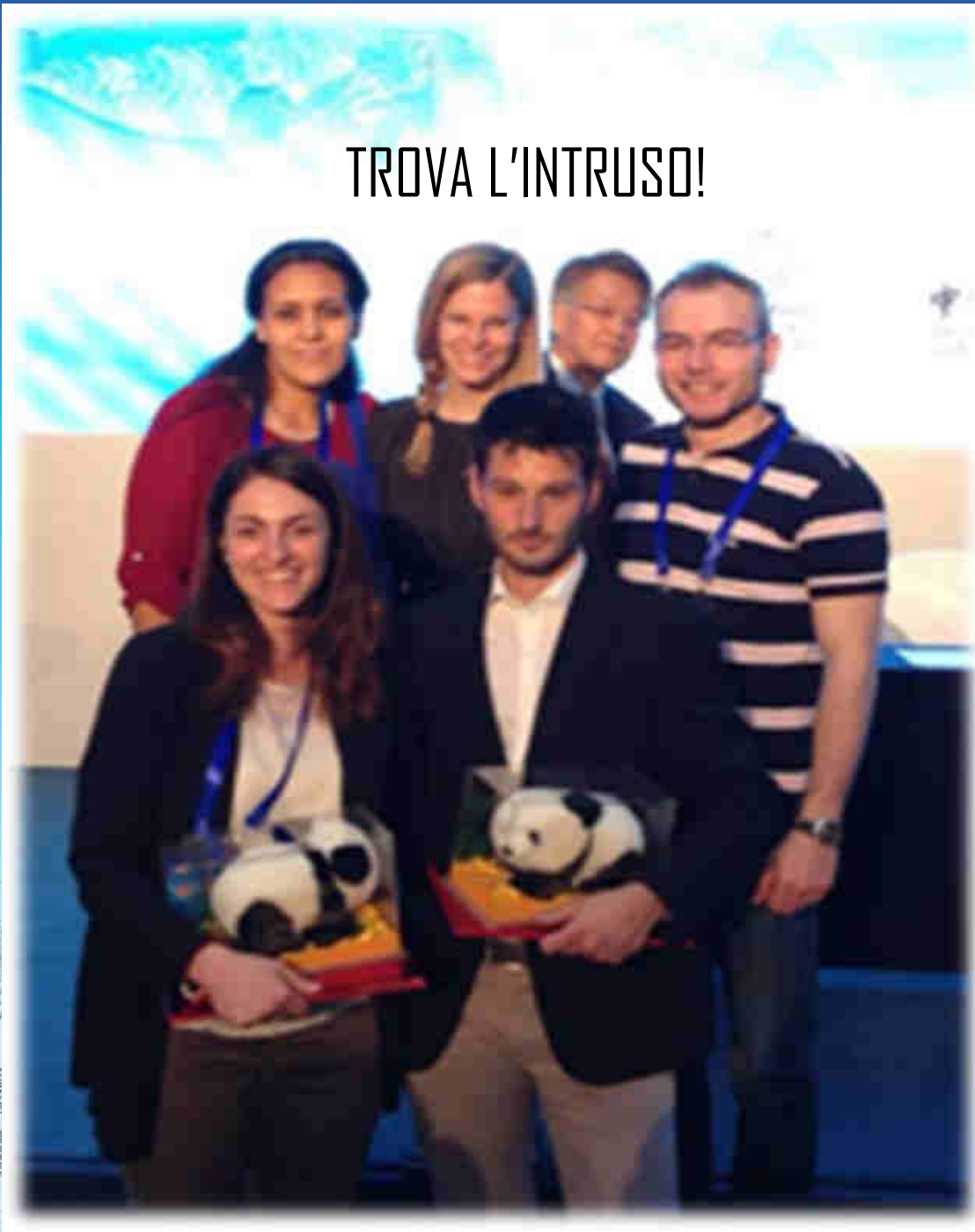
Convegno ASIC 2016

11th WRC: Inviati speciali in Cina

30 settembre 2016, Padova

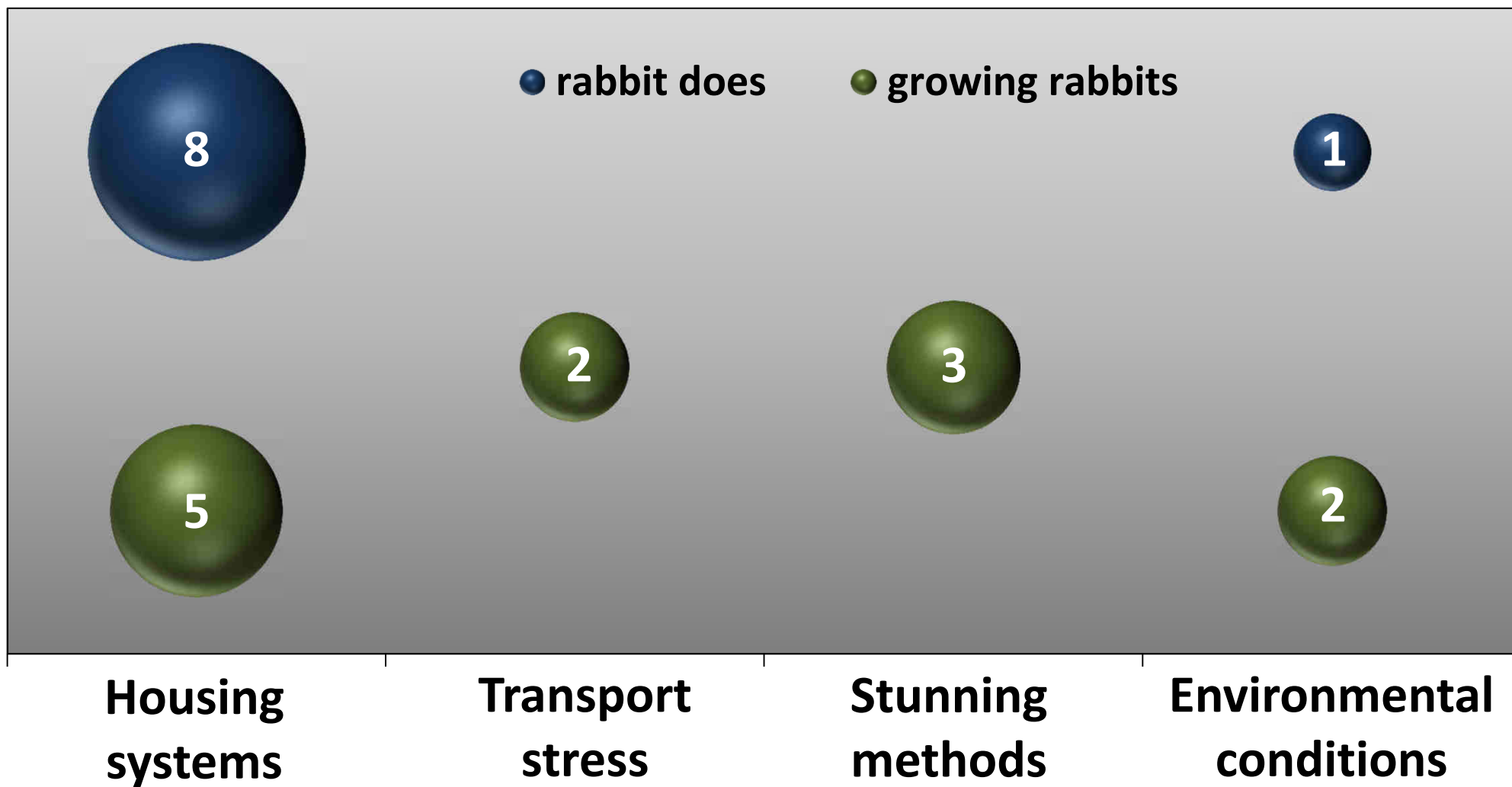


TROVA L'INTRUSO!



Ethology and welfare

21 studies focused on:



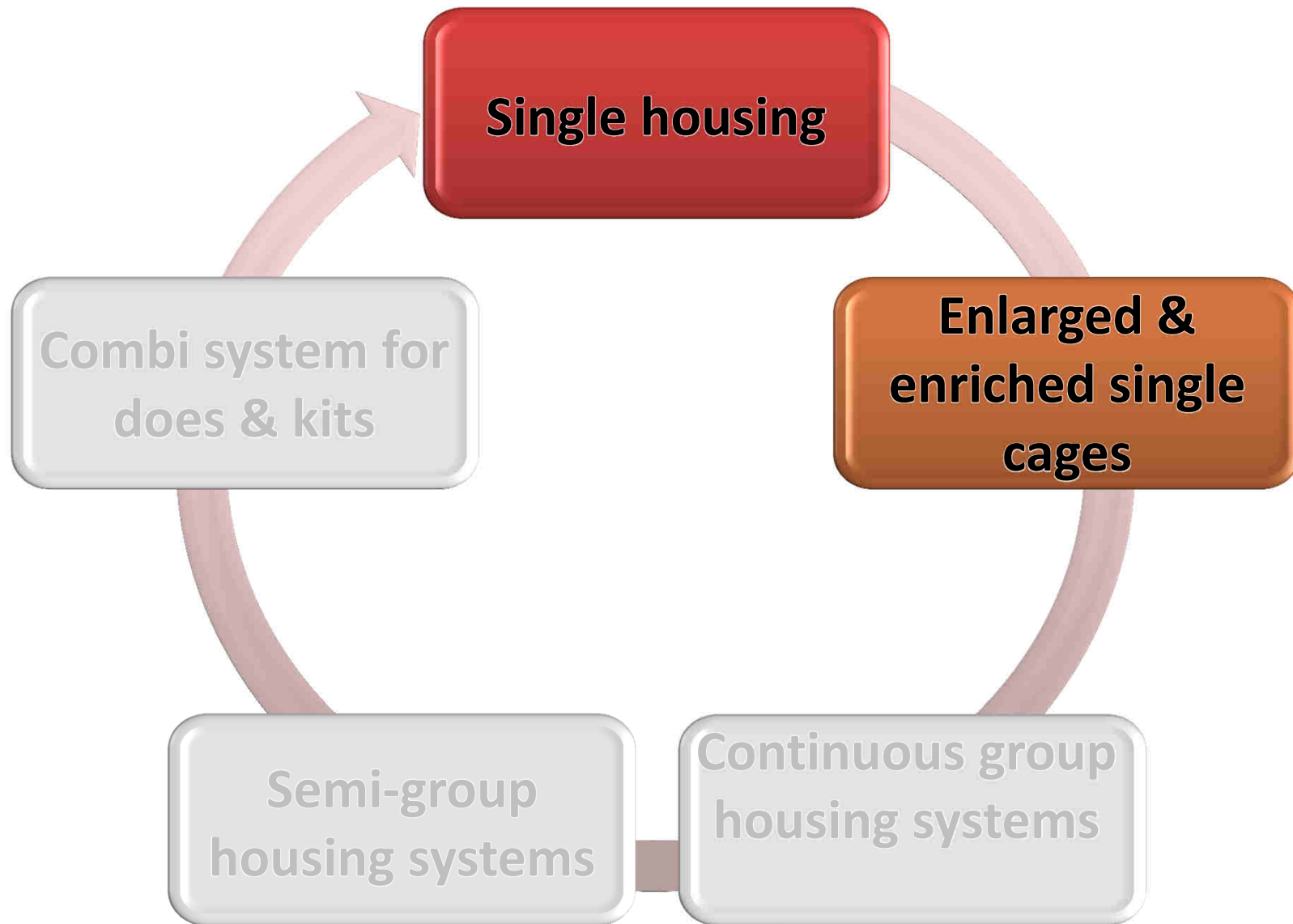
Main paper:

ALTERNATIVE HOUSING SYSTEMS FOR RABBIT DOES

Hoy St.^{1*}, Matics Zs.²



Alternative housing systems for rabbit does



Alternative housing systems for rabbit does: from standard to enlarged and enriched single cages

Trials

Cage dimensions

- size (standard or double)
- height (30 cm, 40 cm, 50 cm, open-top cages)

Elevated platform

- different materials (wire net, plastic-mesh, wire net + footrest)

Environmental enrichment

- types (gnawing stick, pinewood stick, straw, wooden block)

Nest characteristics

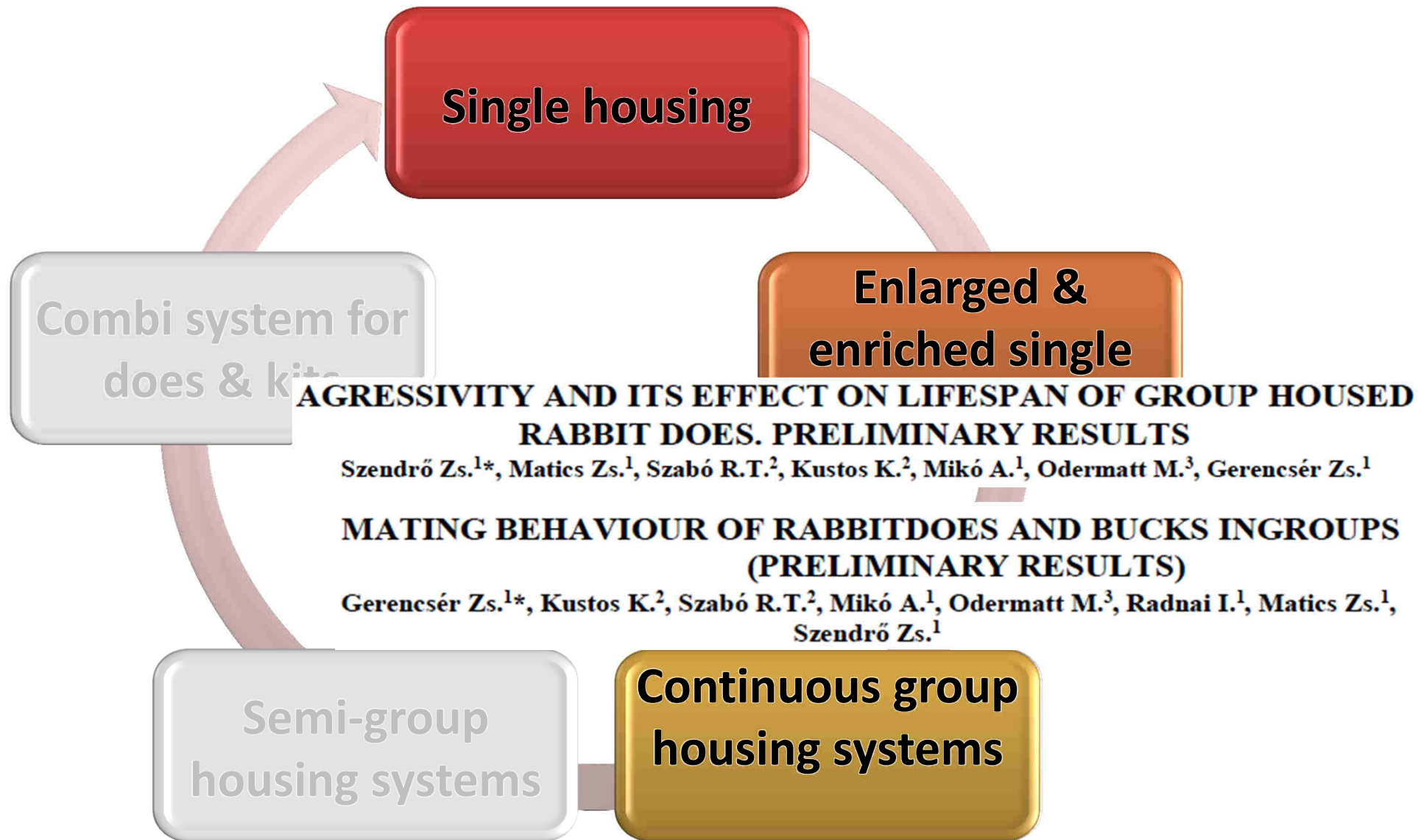
- nest material (hay, straw, wood shaving, Lignocel®)

PREFERENCE OF RABBIT DOES AMONG DIFFERENT NEST MATERIALS

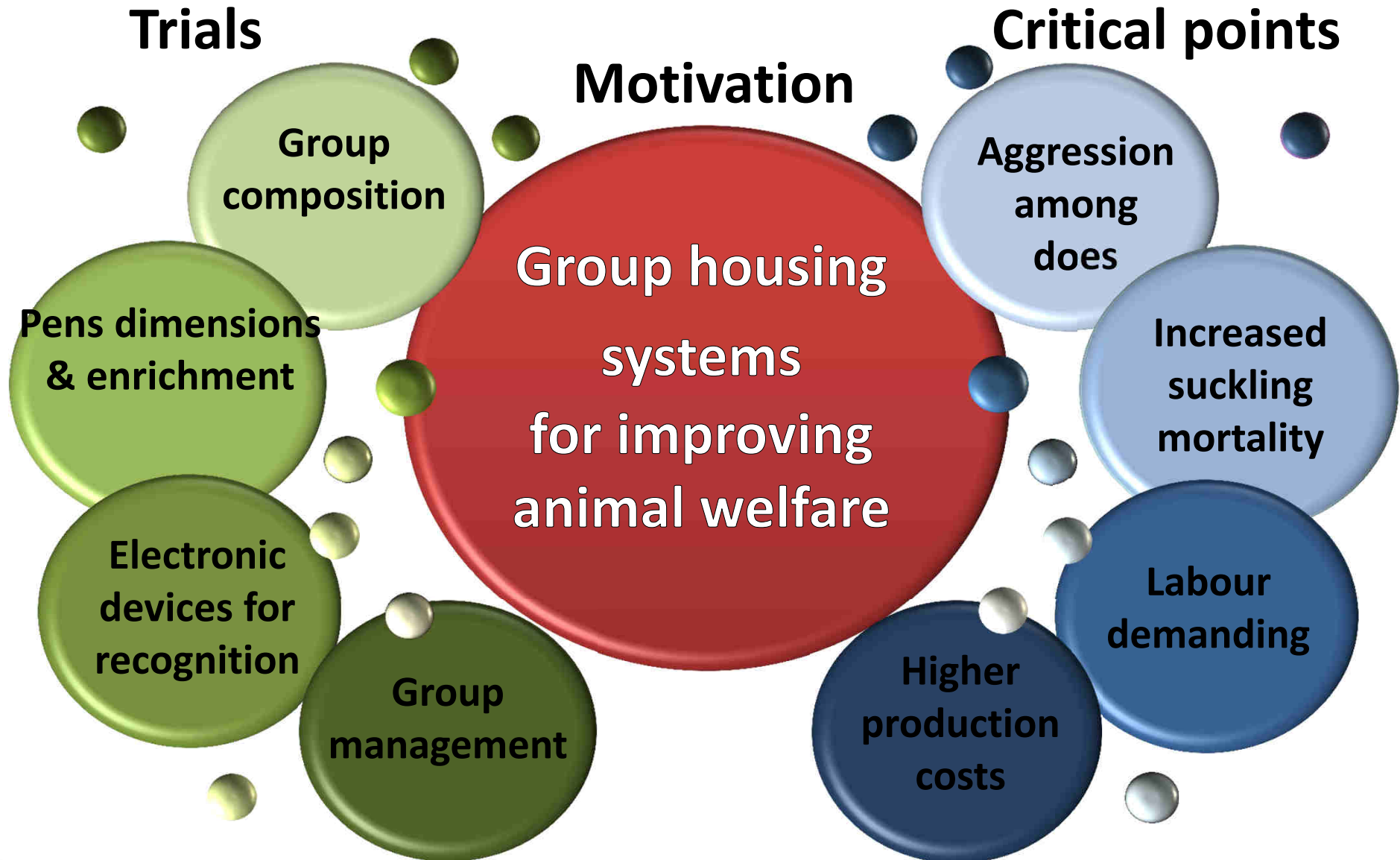
Farkas T.P.^{1*}, Szendrő Zs.¹, Matics Zs.¹, Radnai I.¹, Mayer A.², Gerencsér Zs.¹



Alternative housing systems for rabbit does



Alternative housing systems for rabbit does: continuous group housing system



Alternative housing systems for rabbit does

Single housing

PRODUCTION PERFORMANCES OF RABBIT DOES IN A PART-TIME GROUP HOUSING SYSTEM

L. Maertens*, S. Buijs

PERFORMANCE AND HEALTH STATUS OF PRIMIPAROUS RABBIT DOES HOUSED IN INDIVIDUAL AND COLLECTIVE CAGES

Machado L.C.^{1*}, Martínez-Paredes E.², Paragliota F.³, Cervera C.²

IMPACT OF HOUSING SYSTEM (CAGE VS. PART-TIME HOUSING) AND FLOOR TYPE ON RABBIT DOE WELFARE

L. Maertens, S. Buijs*

CHARACTERIZATION STUDY OF AGGRESSIVE BEHAVIOURS IN GROUP-HOUSED RABBIT DOES

Trocino A.^{1*}, Zomeño C.¹, Birolo M.², Zuffellato A.³, Xiccato G.²



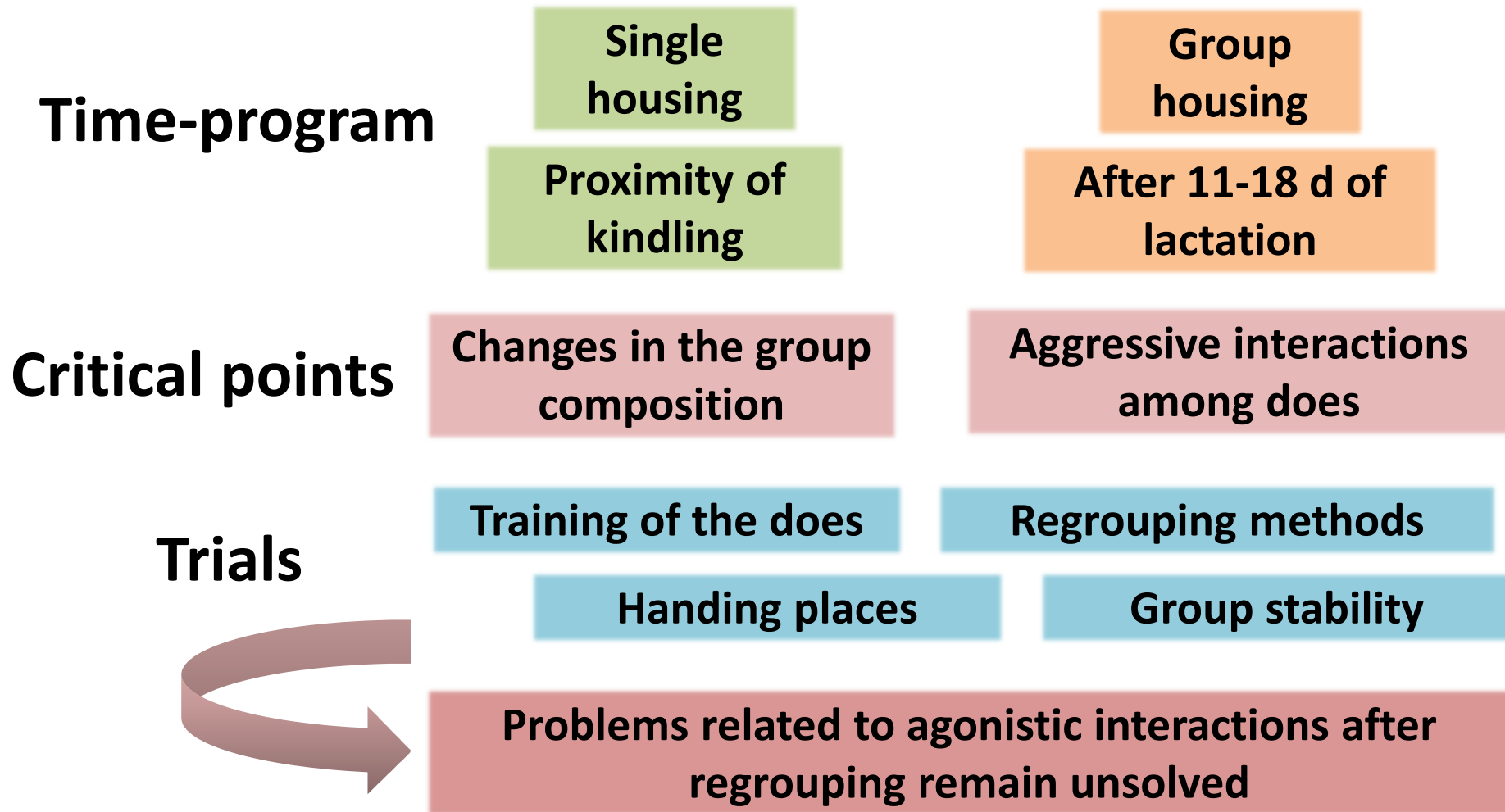
Enlarged & enriched single cages

Semi-group housing systems

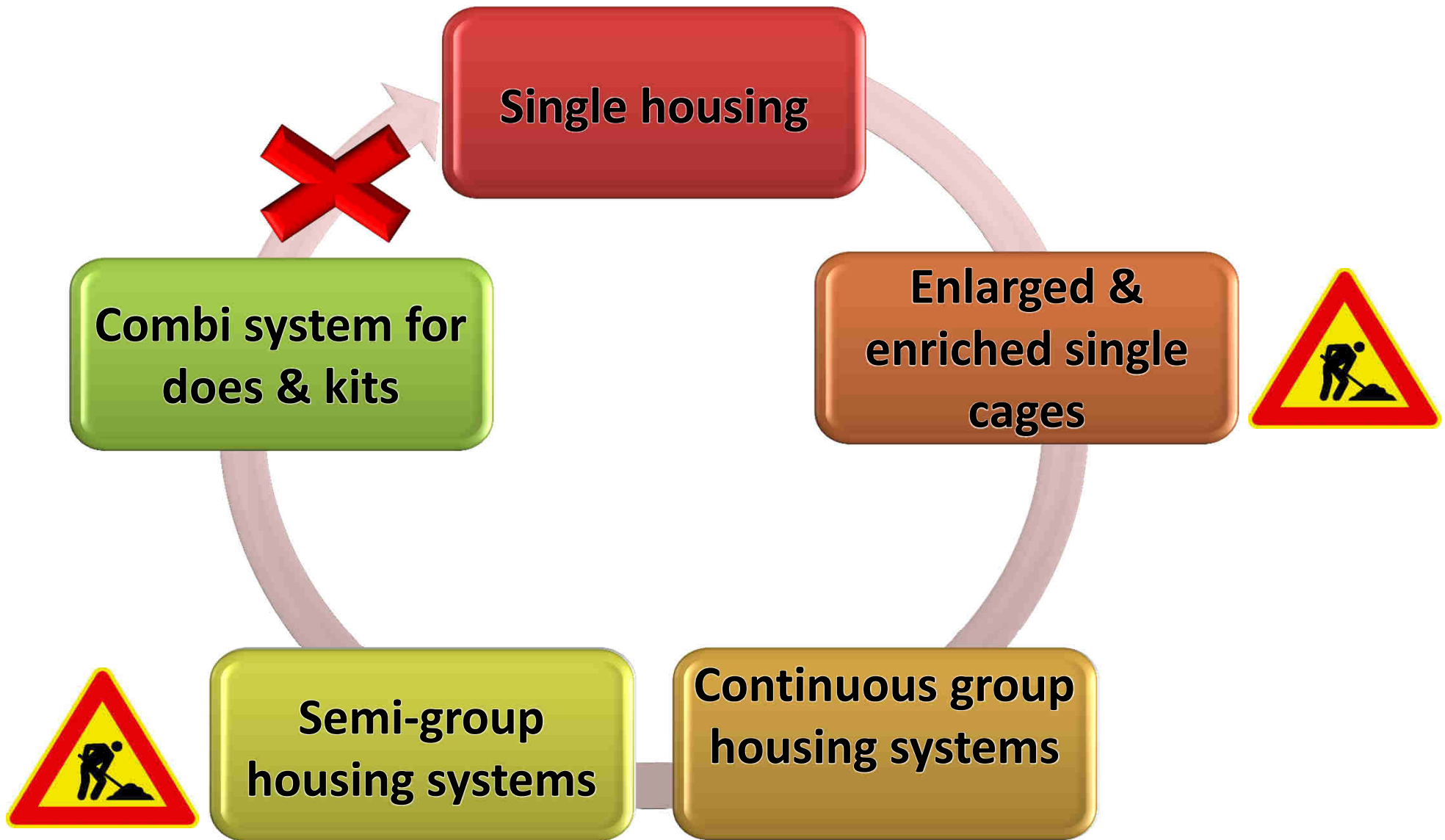
Continuous group housing systems



Alternative housing systems for rabbit does: semi-group housing system



Alternative housing systems for rabbit does

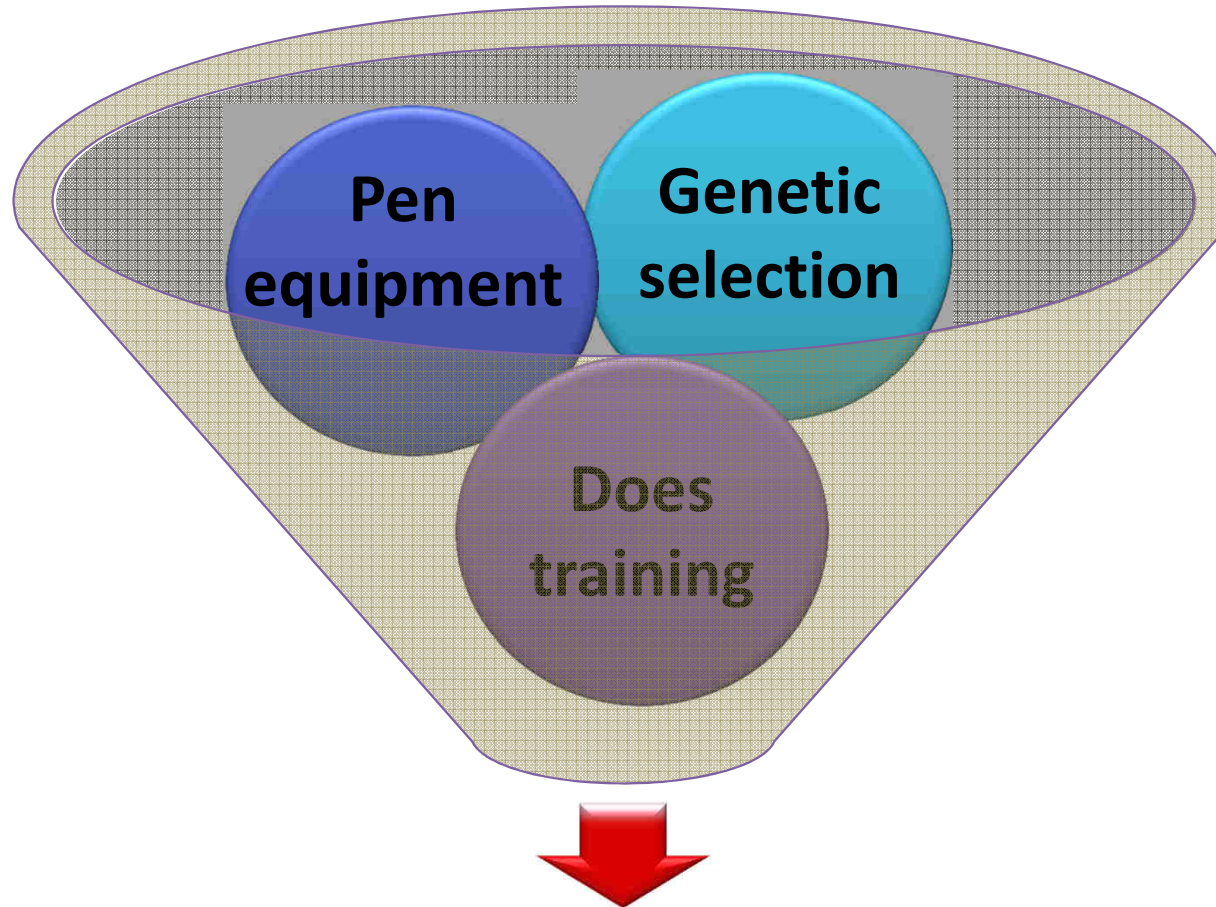


Alternative housing systems for rabbit does: what was established

- ✓ **Continuous group housing systems are not sustainable either for production or welfare aspects**
- ✓ **Semi-group housing systems allow high productivity, but do not solve the aggressiveness among does**
- ✓ **The combi system improves animal welfare and guarantees high performance and hygienic conditions**



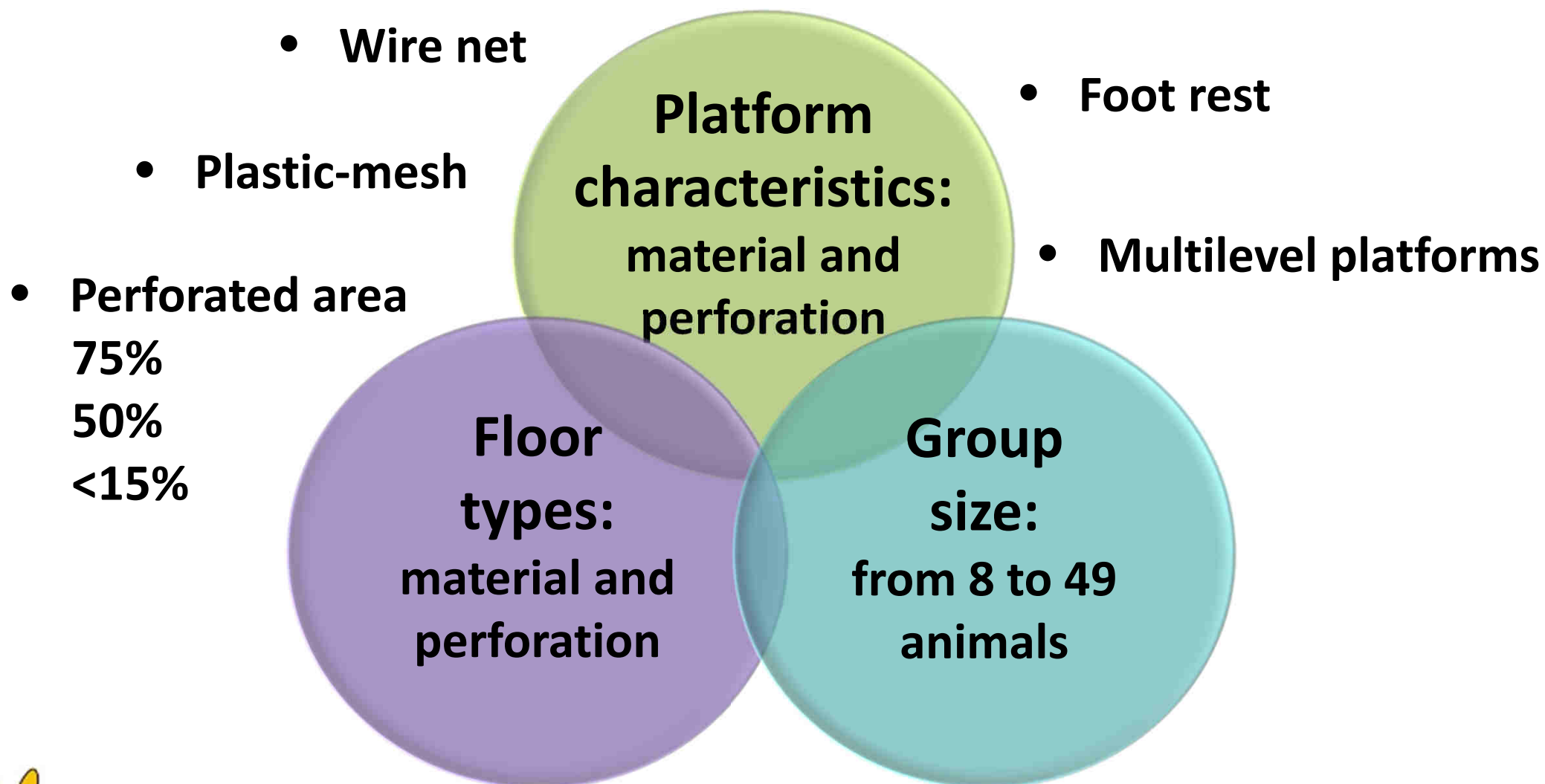
Alternative housing systems for rabbit does: future perspectives



alternatives to reduce agonistic interactions in semi-group housing systems



Collective housing systems for growing rabbits



Measurements

Growth performance

Hygienic conditions

- feet dirtiness

Health status

- mortality
- skin lesions
- feet lesions

Preference

- usage of different areas



PRODUCTION OF GROWING RABBITS IN LARGE PENS WITH AND WITHOUT MULTILEVEL PLATFORMS

Farkas T.P.^{1*}, Dal Bosco A.², Szendrő Zs.^{1,4}, Filiou E.³, Matics Zs.¹, Odermatt M.⁴, Radnai I.¹, Paci G.⁵, Gerencsér Zs.¹

THE USAGE OF MULTILEVEL PLATFORMS IN GROWING RABBITS HOUSED IN LARGE PENS AS AFFECTED BY PLATFORM MATERIAL (WIRE-MESH VS PLASTIC-MESH)

Gerencsér Zs.^{1*}, Farkas T.P.¹, Dal Bosco A.², Filiou E.³, Matics Zs.¹, Odermatt M.⁴, Paci G.⁵, Szendrő Zs.^{1,4}

COMPARISON OF FATTENING PERFORMANCES HOUSED IN PARKS OR ENRICHED CAGES

L. Maertens, S. Buijs*



Collective hosing systems for growing rabbits: conclusions and future perspectives

- ✓ **Growing rabbits housed in large pens or in collective cages achieve similar productive performances**
- ✓ **Growing rabbits spend more time on the floor rather than on elevated platforms**
- ✓ **Plastic-mesh platforms are most used by animals with respect to wire-mesh ones**
- ✓ **Further investigations may be carried out to define the most appropriate floor types**



Transport stress

- In condition of short and comfortable transports the stress indicators are weakly affected in growing rabbits reared collectively
- Liver HSP70 expression might be used to evaluate acute stress events in rabbits
- People consider the stress factors affecting rabbits during transport differently based on their knowledge

CHANGES OF STRESS INDICATORS IN DIFFERENT MATRICES IN GROWING RABBITS BEFORE AND AFTER TRANSPORT

Bertotto D.^{1*}, Radaelli G.¹, Negrato E.¹, Birolo M.², Di Martino G.³, Xiccato G.², Trocino A.¹



PERCEPTION OF STRESS FACTORS CONCERNING RABBIT TRANSPORT FROM THE FARM TO THE ABATTOIR

López M.*



Environmental conditions

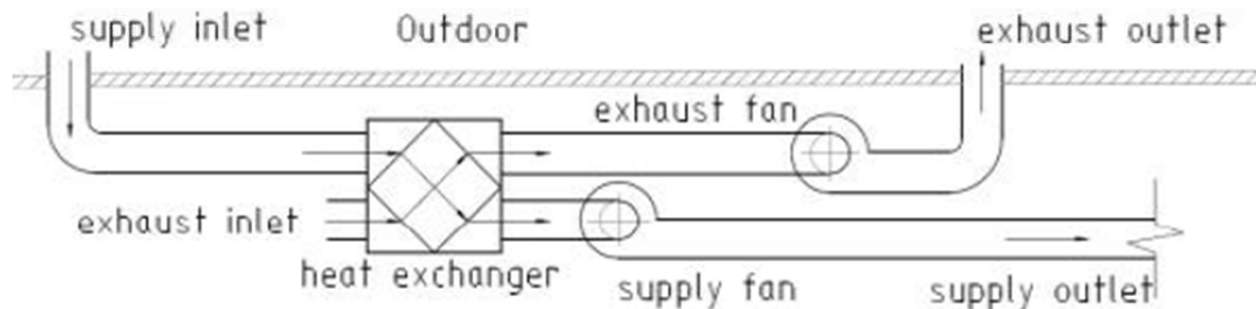
EFFICIENCY OF THE RABBIT UNDERGROUND CELL KEEPING SYSTEM IN REDUCING HEAT SUMMER STRESS

González-Redondo P.^{1*}, Finzi A.²



A MODIFIED HEAT RECOVERY VENTILATION SYSTEM FOR RABBIT HOUSES IN COLD CLIMATES IN NORTHEAST CHINA

Liu P., Wang M.Z., An L., Li Q., Liu Z.Y., Tian J.H., Wu Z.H.*



Stunning methodologies

EFFICACY OF BLUNT FORCE TRAUMA VERSUS NON-PENETRATING CAPTIVE BOLT FOR ON-FARM EUTHANASIA OF PRE-WEANED KITS, GROWERS AND ADULT RABBITS

Walsh J.^{1*}, Percival A.¹, Lawlis P.², Turner P.V.¹

Canada

Euthanasia at farm

Comparison of euthanasia methods

- Blunt force trauma
- Cervical dislocation
- Non-penetrating captive bolt

Europe

Stunning at slaughterhouse

Validation of animal unconsciousness

Optimization of the stunning procedure

DEFINITION OF INDICATORS TO EVALUATE CONSCIOUSNESS OF RABBITS AT THE TIME OF SLAUGHTER AND OPTIMISATION OF PARAMETERS FOR ANIMAL PROTECTION

Bignon L.^{1*}, Boucher S.², Rousseau C.³, Bourin M.¹



Stunning methodologies

Conclusions

- **Bleeding should take place within 30 seconds of electro-narcosis**
- **Electrical stunning for one second guarantees unconsciousness**
- **Blunt force trauma is not an effective method for euthanasia of adult rabbits**
- **The non penetrating captive bolt device is reliable and effective causing irreversible damage to the brain**





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Thank you for your attention

Convegno ASIC 2016, Padova, September 30 2016

