

**How high is herbage intake of organic rabbits grazing fescue or sainfoin?**

H. Legendre<sup>1</sup>, J.P. Goby<sup>2</sup>, J. Le Stum<sup>2</sup>, G. Martin<sup>3</sup> and T. Gidenne<sup>1</sup>

<sup>1</sup>INRA, GenPhySE, Université de Toulouse, 31326 Castanet Tolosan, France, <sup>2</sup>Université de Perpignan, IUT, 66962 Perpignan, France, <sup>3</sup>INRA, AGIR, 31326 Castanet Tolosan, France; [heloise.legendre@inra.fr](mailto:heloise.legendre@inra.fr)

Little is known about herbage intake of grazing rabbits. We determined herbage intake and pasture utilization of rabbits fattened under organic production standards. During spring 2016, 30 rabbits were raised for 9 weeks in rolling cages (3 rab. per cage with 0.4 m<sup>2</sup> of grazing area per rabbit, the minimum rate specified by the organic standards) from weaning at 43 days of age. 5 cages were moved on a pure stand of tall fescue (*Festuca arundinacea*, F), and 5 cages on a grassland dominated by sainfoin (*Onobrychis viciifolia*, S). Cages were moved every day, and rabbits were supplemented with 60 g/d/rab. (52.5 g dry matter, 'DM') of a complete pelleted feed (no refusal). Once a week, herbage samples were collected at two locations (0.25 m<sup>2</sup> each) for each cage: on the side of the cage to measure herbage allowance, and on the line of the cage, just after moving it to measure grazing refusals. Herbage intake was estimated as the difference between herbage allowance and refusals, and expressed per kg of metabolic weight (kg<sup>0.75</sup>). Over the whole grazing period, herbage allowance was higher in S than in F (5.1 ton DM/ha or 120.1 g DM/kg<sup>0.75</sup> vs 2.2 ton DM/ha or 59.5 g DM/kg<sup>0.75</sup>, P<0.01), and herbage intake (59.2 g DM/kg<sup>0.75</sup> vs 37.3 g DM/kg<sup>0.75</sup>, P<0.01) accounted for respectively 47% and 65% of the allowance. During the first grazing week, rabbits displayed limited herbage intake (resp. 15.8 and 7.8 g DM/kg<sup>0.75</sup> for S and F, P=0.39) and utilization (16% and 20%). Thereafter, herbage intake increased and the maximum was reached on week 9 for S rabbits (112.3 g DM/kg<sup>0.75</sup> or 947.5 g of fresh matter/2.5 kg rab., 70% of the allowance), and on week 5 for F rabbits (51.2 g DM/kg<sup>0.75</sup>, 60% of the allowance). Herbage allowance in F dropped during the last 4 weeks (46.8 g DM/kg<sup>0.75</sup>) yielding lower intake (35.3 g DM/kg<sup>0.75</sup>) but enhanced utilization, i.e. 77% in average, and up to 93% in week 6. In conclusion, rabbits develop a high herbage intake capacity during fattening (up to 40% of their bodyweight). When herbage biomass is too low (i.e. below 85 g DM/kg<sup>0.75</sup>), stocking rate per cage must be adjusted in order to increase herbage allowance per rabbit.