## BEHAVIORAL VALUATION OF WELFARE IN THE MILKING PARLOR FOR DAIRY COWS

Cerqueira<sup>1,2,3</sup>, Joaquim; Araújo<sup>1,2,4</sup>, José; Cantalapiedra<sup>5</sup>, Jesús; Camiña<sup>6</sup>, Mercedes; Iglesias<sup>6</sup>, Antonio; Blanco-Penedo<sup>7</sup>, Isabel

<sup>1</sup> Escola Superior Agrária do IPVC, Refóios do Lima, 4990-706 Ponte de Lima. Portugal.

- <sup>2</sup> Centro de Investigação e Desenvolvimento em Sistemas Agrolimentares e Sustentabilidade (CISAS) IPVC, Viana do Castelo. Portugal.
- <sup>3</sup> Centro de Investigação em Ciência Animal e Veterinária (CECAV) e Laboratório Associado para Ciência Animal e Veterinária (AL4AnimalS). Portugal.
- Centro de Investigação de Montanha (CIMO), ESA IP Viana do Castelo. Portugal
  Servicio de Ganaderia de Lugo. Xunta de Galicia. Spain.
- <sup>6</sup> Facultad de Veterinária de Lugo, Universidad de Santiago de Compostela. Spain.
- Departamento de Ciencia Animal, Universidad de Lleida, Av. Rovira Roure 191, 25198 Lleida. Spain.

## tsukijizo@gmail.com

Milking cows is one of the most important tasks on dairy farms. Poorly performed milking can lead to animal welfare problems manifested by increased aversive behaviour. Kicking is defined as the cow's behaviour as she shifts her weight from one leg to the other (Rousing et al., 2006). Several factors are associated with stepping behaviour during milking, such as the quality of the human-animal relationship, lameness, teat injuries, milk production, and number of parturitions, among others. This study aimed to correlate step frequency with animalrelated factors. The study included 32 farms with a total of 1799 cows. At each milking, the number of steps taken by each animal was recorded. The lactations of the animals studied were divided into three classes: first class: cows with 1-lactation cows: second class: cows with 2 and 3 lactations and third class: cows with four or more lactations. The lactation phases were defined according to the milk contrast: 1st phase: ≤ 60 days; 2nd phase: 61 to 120 days; 3rd phase: 121 to 180 days and 4th phase: > 180 days. The degree of lameness was also assessed according to the method of Sprecher et al. (1997). Statistical treatment of the data was carried out using the SPSS program. Animals with four or more lactations had a significantly higher number of steps (P<0.001) compared to cows with fewer lactations, with an average of 6.43±5.99 steps for primiparous cows and 8.02±7.69 steps for cows with four or more lactations. No differences (P>0.05) were observed in the number of steps taken at different stages of lactation, although cows in the third stage of lactation showed a greater number of significant steps (7.61). In the lameness score, differences (P<0.001) were found in the frequency of steps, with animals scoring 5 having three times more steps than cows with little or no lameness (scores 1 and 2). It has been observed that lame cows were very agitated during milking, probably related to the pain felt in the limb affected by this pathology. Therefore, observing the steps and related behaviour during milking can help to detect lame cows or other problems.