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Competitiveness of extensive beef cattle farms located in the dehesa ecosystem (SW Europe)

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Beef pasture-based systems of Europe, especially those located in disfavored areas, play a key role in the maintenance of the ecosystems and rural population. However, they suffer from low competitiveness. In this sense, the design of improvement measures is needed. Due to this, this work has two objectives: (1) to assess the competitiveness of the beef pasture-based systems of the Spanish rangelands ('dehesas'); (2) to design improvement measures. For this purpose, a Competitiveness Index (CI) was created on the basis of technical and economic indicators. According to this index, farms were classified in three groups (1 = highly competitive but very dependent on subsidies; 2 = medium level of competitiveness; 3 = low competitiveness but low dependence on subsidies). Group 1 showed the highest scores for the CI (61.46%), mainly due to their lower external dependence on feedstuff, their lower production costs, their larger amount of fattened calves sold per cow, and their high profitability rate. Group 2 had intermediate scores for the majority of indicators, as well as for the CI (49.20%). However, Group 3 showed very low results for the economic indicators, they also showed the lowest dependence on subsidies, and the lowest scores for the CI (34.40%). In general terms, the profitability rate, fattened calves sold per cow, and the dependence on subsidies are the issues on which farms' competitiveness mainly rely. In this sense, the increase of the self-sufficiency, the implementation of a fattening period, and the establishment of contracts with the next link of the agri-value chain must be encouraged in the farms analyzed.

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Productivity dynamics of a premium Welsh beef supply-chain during a three year period (2010 to 2012)

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There are a number of specialist beef schemes in the UK which market specific characteristics, such as area of geographical origin, breed (e.g. Hereford or Aberdeen Angus) or brand identity, in order to differentiate their products. One example is the premium Welsh beef brand 'Celtic Pride Ltd', who strive to deliver fully traceable Welsh beef which is of consistently high eating quality via defined protocols covering on-farm, slaughter and processing criteria. Commercially, animals are typically selected for slaughter primarily on degree of fatness. This study's aim was to describe data trends in cattle numbers, sex, breed, age, carcass weight (CW), conformation and fatness, and to examine the relationships between age and carcass weight. Number of cattle slaughtered has increased ~19% per year from 2,925 in year 1 to 4,149 in year 3, with a total of 10,565 cattle slaughtered during the 3 year period. Heifers accounted for 56% and steers 44% of the total number of cattle, with 73% either Limousin or Charolais. During the three years, 77.4% of the total cattle slaughtered achieved the set criteria for age (14-30 mo), carcass weight (240-390 kg), fatness (2-4 L) and conformation (E-R) to qualify for premium. Average daily carcass gain (ADCG) was calculated and plotted against CW. These parameters were found to have a positive relationship, with ADCG ranging 0.22-0.98 kg/d and CW ranging 189.9-463.2 kg. Mean and standard error values were 0.46±0.001 kg/d and 327.7±0.38 kg for ADCG and CW, respectively. From a physiological perspective, a positive relationship between these two parameters was anticipated. Interestingly, the data suggests that slower growing animals with lower ADCG result in lighter carcasses at slaughter, irrespective of target fatness grades.