

THE CHALLENGES AHEAD FOR ANIMAL BUILDINGS FACED WITH THE EMERGENCE OF HOT CLIMATE CONDITIONS IN PORTUGAL.

V. Fitas da Cruz¹, F. Baptista¹ and J.C. Barbosa²

¹ ICAAM, Escola de Ciências e Tecnologia, Universidade de Évora, Apº 94, 7002-554 Évora, Portugal; fb@uevora.pt

² CIMO, Escola Superior Agrária de Bragança, Apº 1172, 5301-855 Bragança, Portugal

Summary

Portugal has a Mediterranean climate characterised by hot, dry summers. According to data from the Portuguese IM (Instituto de Meteorologia), over the last decade, summer temperatures have tended to be higher, with a greater incidence of heat waves, temperatures above 40 °C, and periods of consecutive warm nights (daily minimum air temperature over 20°C).

During the summer, very high temperatures and heat waves are becoming increasingly common in Portugal. The summers of 2003, 2004, 2005 and 2006 were among the hottest ever registered.

These frequently hot climate conditions can cause problems in intensive animal production, or even to livestock in extensive systems. In most cases, the livestock buildings are not designed for animal production under high temperatures and most of them do not have environmental control equipment suitable for controlling the indoor climate under such conditions.

An analysis of climatic data revealed the existence of two regions (Alentejo and Trás-os-Montes) where high temperatures are more usual and summers tend to be hot. In these two regions, livestock numbers are high and play a major role in the regional economy. The occurrence of hot climate conditions was identified and its impact on the environmental conditions in animal housing discussed.

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