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### ► To cite this version:

Marie-Christine Bourin, Laure Bignon, Bertrand Méda, Frederic Mercierand, Léonie Dusart, et al.. Multicriteria assessment of different rearing systems for intermediary growing broilers. 22th European Symposium on the Quality of Poultry Meat - 16th European Symposium on the Quality of Eggs and Egg Products, May 2015, Nantes, France. 190 p. hal-02738737

**HAL Id: hal-02738737**

**<https://hal.inrae.fr/hal-02738737>**

Submitted on 2 Jun 2020

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[M7-03]: *Production schemes and meat quality* (ID: 100120)

[France]

### **Multicriteria assessment of different rearing systems for intermediary growing broilers**

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In France, production of poultry meat relies essentially on the production of standard fast growing broilers in intensive system. If this production is effective from an economic point of view, it also has to deal with criticisms concerning the image of its production systems. To meet the social concerns while insuring acceptable economic and environmental performances, innovative systems of production were evaluated in conditions close to field. Thus, 3 types of housing environment were compared for medium-growing chickens. Classical rearing in confinement was compared to i) rearing giving a free access to a winter garden allowing a limited and sheltered outside access and ii) rearing giving animals a free access to outdoor as it is practiced for "Label Rouge" production. Experiment was repeated twice, in spring and in autumn, and included each time two flocks of 230 animals by condition. The density in poultry house was 14 chickens/m<sup>2</sup> and outdoor access was allowed from 30 to 57 days (slaughter age). A multicriteria analysis was performed including measurements of live performances, behavior, carcass and meat quality, welfare and environment. Results indicate that rearing chickens in alternative systems barely affect their growth performances and meat yields. They even allow producing less fatty carcasses. A major advantage of the alternative systems is to favor the general activity of animals and limit the occurrence of food pad dermatitis. The multicriteria assessment of the three production systems showed that the development of alternative systems would improve the image of the products without significant adverse impact on the economic and environmental performance.

**Keywords:** Alternative rearing system, Meat quality, Multicriteria assessment