**Influence of Algae-based seaweed complex on broilers zootechnical and economical**

**performances**

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**Abstract**

During the first week of life, the maternal immunity of the day old chicks (DOC) decreases progressively. In this context, Amadéite developed two algae cocktails aiming to reduce the negative effects of immune depression and stress occurring during the setting up of DOC. The objective of this study was to demonstrate zootechnical efficiency, , of these two algae complexes via supplementation in the drinking water in commercial farm conditions The study was carried out on over 450 000 DOC distributed in sixteen houses: one control (using regular farm prophylaxis) and 1 test (using “algae” prophylaxis) in each of eight farms participating to the trial. The test houses received the first algae cocktail between 24 or 36 hours of setting up and the second cocktail the day before and two days after Gumboro vaccine, realized around the fifteenth day. An evaluation of the economic impact of “algae” prophylaxis was realized. This trial showed a reduction of mortality in favor of the test group (4.36 % against 3.39 % respectively for control and test group) as well as condemnation (0.65 % against 0.56 % respectively for control and test group). No differences were observed for feed conversion rate (FCR) and daily weight gain (DWG). The evaluation of economic impact revealed an increase in net benefits of 623 € per twenty- eight thousand broilers unit in favor of the test group. The repetition of this study at a larger scale and for a longer period would be interesting to confirm these results. At the same times, IN VITRO test on global immune system or specific by receptor on digestive tracts will allowed to identify the mechanism of algae complexes.

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**Keyworlds**: Broilers, Seaweed complex, zootechnical and economical performances