



**Abstract: Raising Broilers without Antibiotics Thanks to Algae**

**Authors: Mrs Pi Nyvall Collén, Mr Olivier Biannic, Mr Thomas Pavie**

The development of antibiotic resistance is one of the top five public health concerns according to WHO (World Health Organization).

Based seaweed collected from natural populations occurring as regular green and red tides the Olmix Group has formulated a complete range of algo-based ingredients for animal care, used as foundation for a complete program aiming at accompanying producers to achieve antibiotic free production and limit the development of antibiotic resistance. This program called "Thanks to Algae" is adapted to each farm based on a global approach, relying on strong technical and management support with the use of the specific algae-based products.

The program is validated in industrial poultry production on three different genetics (JA, JA957 and JA987) and on densities between 18 (JA) and 32 (JA957 and JA987) birds per square meter, with times to slaughter from 32 days (JA957 and JA987) to 56 days (JA). It has been used on a total of 22 batches, corresponding to 625 565 broilers, with 36 control batches, corresponding to 1 038 532 broilers.

For broilers raised at high density (JA957 and JA987) the Thanks to Algae Program led to a drastic decrease of antibiotic use (-92%) while maintaining (average weight at slaughter) or improving (FCR, mortality) performance. Moreover, the condemnation rate at slaughter was reduced. For broilers raised at low density, the program helped to maintain a high level of performance and a low use of antibiotics (<5%) while significantly reducing the severity of pododermatitis, improving feet scoring (-39%,  $P < 0.05$ ).

In conclusion, the Thanks to Algae program allow to raise broilers with a low use of antibiotics ( $\leq 5\%$ ) while improving performance.