

Program	PN III, Programul 2, Subprogramul 2.1. - Transfer la operatorul economic
Project Leader	AVICOLA LUMINA SA
Project title (ENG):	New nutritional solutions for hens, rich in cellulose, determinant in increasing the competitiveness of a poultry unit by reducing production costs and increasing the quality of eggs
Project title (RO):	Noi solutii nutritionale pentru gaini ouatoare, bogate in celuloza, determinante in cresterea competitivitatii unei unitati avicole prin diminuarea costurilor de productie și creșterea calității ouălor
Duration	2016-2018
Team Leader Partner 2	Senior Researcher Eng. Virgil Criste
Summary (short description) ENG	<p>The project follows to develop new nutritional strategies, consisting of complex and innovative feed recipes for laying hens using by-products rich in cellulose and with impact in the price of feed; know-how on superior capitalization of by-products with rich content in cellulose; increasing consumer confidence in functional foods (eggs with low cholesterol) that can be obtained using new nutritional strategies. It will develop a set of minimum four nutritional solutions that will test in experimental halls and two best nutritional solutions will experience in the production halls of the project coordinator to establish the top solution.</p> <p>INCD ECOIND activities are: to establish the amount of cellulose / feed which is best enzymatic processed; to establish the timing of residual enzyme and the enzymatic activity in the digestive tract; to identify the risk factors and assess the impact of nutritional solutions used in experiments by chemical and microbiological determination from samples of feed and manure; to determine the presence of minerals in eggs collected in experiments; to prioritize the tested nutritional solutions based on quality of eggs.</p>
Summary (short description) RO	<p>Proiectul urmareste elaborarea de noi strategii nutritionale, alcatuite din retete furajere complexe cu caracter inovativ, pentru gaini ouatoare, prin utilizarea de subproduse bogate in celuloza si cu impact in pretul furajelor; know how-ul privind valorificarea superioara a subproduselor cu continut bogat de celuloza; cresterea increderii consumatorilor in alimente cu caracter functional (oua cu continut redus de colesterol) care se pot obtine prin folosirea noilor strategii nutritionale. Se va elabora un set de minimum patru solutii nutritionale care se vor testa la nivel de hale experimentale iar cele mai bune doua solutii nutritionale se vor experimenta in halele de productie ale coordonatorului de proiect in vederea stabilirii solutiei de top.</p> <p>Activitatile INCD ECOIND sunt: stabilirea cantitatii de celuloza/ furaj care este cel mai bine procesat enzimatic; stabilirea timpului de remanenta a enzimei si a activitatii enzimatice la nivelul tractusului digestiv; identificarea factorilor de risc si evaluarea impactului solutiilor nutritionale utilizate in experimente prin determinari chimice si microbiologice din probele de furaje si dejectii; determinarea prezentei mineralelor in ouale recoltate in experimente; ierarhizarea solutiilor nutritionale experimentate pe baza calitatii oualor.</p>
Dissemination of results	
Conferences (platform, poster, abstract / full-paper)	C. Stoica, A. Banciu, D. Niculescu, V. Criste, M. Nita-Lazar <i>New cellulosic economical enzyme-substrate based diet of pullets</i> , 4th World Congress and Expo on Applied Microbiology and 2nd International Conference on Food Microbiology, 29 noi-01 dec. 2017, Madrid, Spania, prezentare orala si abstract publicat in volum: Conferences series, volum 9, pag. 38, ISSN 1948-5948