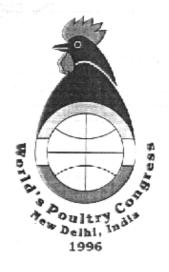
## **PROCEEDINGS**

## ABSTRACTS AND STUDENTS' PAPERS CONTRIBUTED

## IN INTERNATIONAL YOUTH PROGRAMME





World's Poultry Congress New Delhi, India 2-5 September 1996

Volume-IV

## EFFECT OF SORGHUM ON METABOLIC PROFILE OF DUCKS

M.Bagliacca<sup>1</sup>, G.Paci<sup>1</sup>, M.Marzoni<sup>1</sup>, G.Biagi<sup>2</sup> and C.R.Avanzi<sup>1</sup>

<sup>1</sup>Dept. of Animal Production <sup>1</sup>Inst. of Veterinary Clinic. University of Pisa - V.le Piagge, 2 56100 Pisa - Italy

Metabolic profiles were monitored in 24 muscovy duck males and 24 common duck females at 35 days and at the characteristic slaughtering age for each species (57 days and 78 days for common duck and muscovy duck, respectively). Both species of ducks were differently fed (diet C: a commercial diet, maize-soya based; diet A: maize replaced by low tannin sorghum; diet B: maize replaced by a mixture of low and high tannin sorghum, 50% + 50%). The plasma levels measured before slaughter are reported in the table (Mean ± SD).

Blood Parameters	Common duck females			Muscovy duck males		
	diet C	diet A	diet B	diet C	diet A	diet B
Glucose mmol/1	9.1b	9.5a	9.9a	11.5a	11.3ab	11.0b
Cholesterol mmol/1	5.1	4.9	4.9	4.1a	3.4b	4.0a
Triglicerides mmol/1	1.8b	2.6a	2.0b	1.7	1.9	1.6
NEFA μEq/1	843b	994a	647c	515a	465b	496ab
Uric Acid µmol/1	312	338	309	184	198	192
Total proteins g/1	48.5a	46.6ab	44.1b	36.8	37.2	36.5
Albumin µmol/1	178b	192a	182ab	192	189	196

(Means bearing different letters differ : P<.05)

Results show that glucose, triglycerides, and albumin are higher while total proteins are lower in common ducks fed the diets containing sorghum. Glucose level, cholesterol, and free fatty acids are higher in muscovy ducks fed the diets containing sorghum. The different trends observed confirm the big differences between the digestive ability of muscovy and common ducks.