



### Study Objective



Investigate the effects of feeding Zinpro Availa ZMC to broiler breeders on egg production, eggshell quality, hatchability and hatched chick grading.

### Animals



600 Cobb 500 broiler breeder hens and 60 Cobb 500 broiler breeder males, 22 wk of age

### Treatments

Corn-soybean meal basal diet supplemented with:

Treatment	Sulfates, ppm			Zinpro Availa ZMC, ppm		
	Zn	Mn	Cu	Zn	Mn	Cu
Sulfates	100	100	10	—	—	—
Av ZMC Iso	60	60	3	40	40	7
Av ZMC On Top	100	100	10	40	40	7

### Study Duration



46 weeks

### Location



Universidade Federal do Rio Grande do Sul, Porto Alegre, Rio Grande do Sul, Brazil

## Results Summary

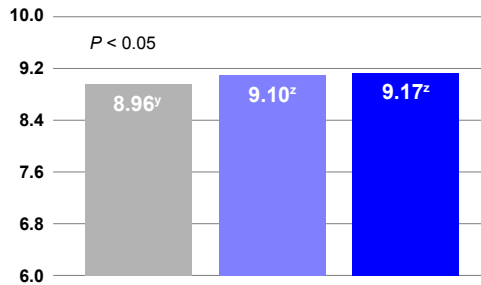
Feeding Zinpro Availa ZMC to broiler breeders had the following effects:

- Improved eggshell quality
- Increased hatchability of fertile eggs
- Zinpro Availa ZMC On Top increased the number of chicks per hen housed
- Zinpro Availa ZMC Iso decreased early embryo mortality
- Based on chicks per hen housed results, the calculated ROI is 6:1 for the Iso treatment and 13:1 for the On Top treatment for a complex processing 1 million birds/week\*

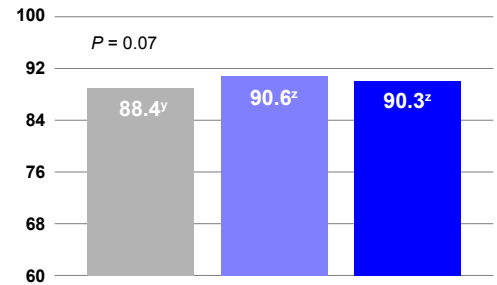


\*USDA National Retail Report Chicken, March 13<sup>th</sup>, 2020

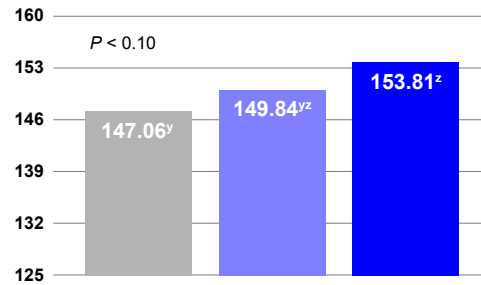
### Relative Eggshell Weight, %



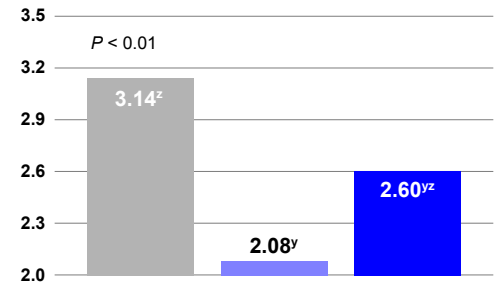
### Hatchability of Fertile Eggs, %



### Number of Chicks per Hen Housed



### Early Embryo Mortality, %



■ Sulfates ■ Zinpro Availa ZMC Iso ■ Zinpro Availa ZMC On Top

## Publication

Favero, A., S.L. Vieira, C.R. Angel, F. Bess, H.S. Cemin, and T.L. Ward. 2013. Reproductive performance of Cobb 500 breeder hens fed diets supplemented with zinc, manganese, and copper from inorganic and amino acid-complexed sources. J. Appl. Poult. Res. 22(1):80-91.

