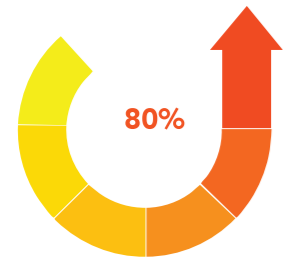
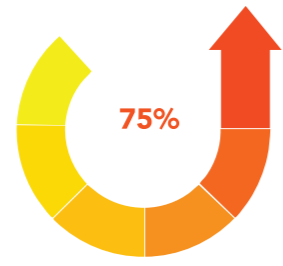


## HYDROLYSIS ABILITY OF PROTEASE TO FEED MATERIA



Degradation rate of Lectins



Degradation rate of Lectins inhibitor

## APPLICATION OF VENSAPRO

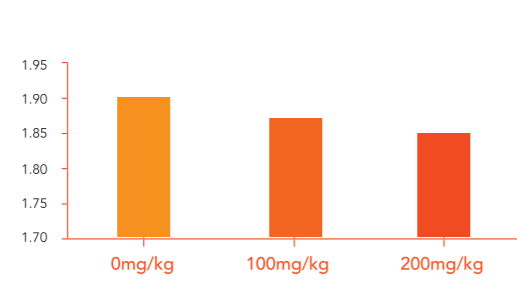
### 1. DIRECT ADDITION

#### VensaPro improves the Production Performance of Broilers from 1D TO 42D.

Effects of VensaPro on ADG in Broilers

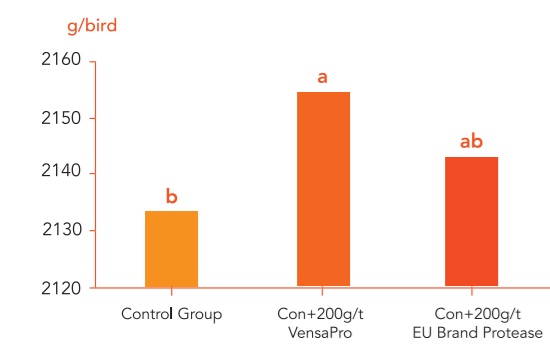


Effects of VensaPro on FCR in Broilers

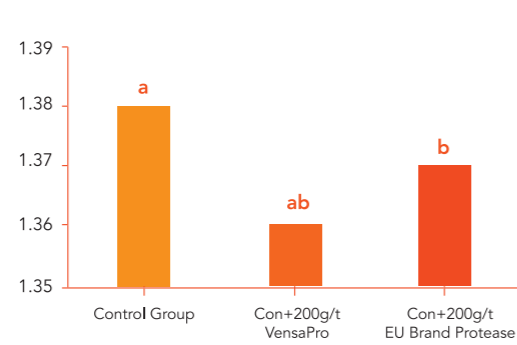


#### VensaPro improves the Production Performance of Broilers from 1d to 33d.

Effects of Protease on BW in Broilers



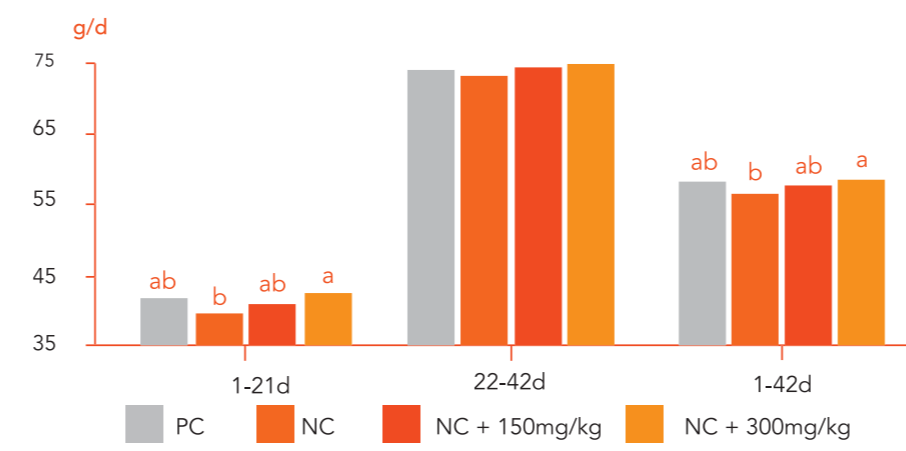
Effects of Protease on FCR in Broilers



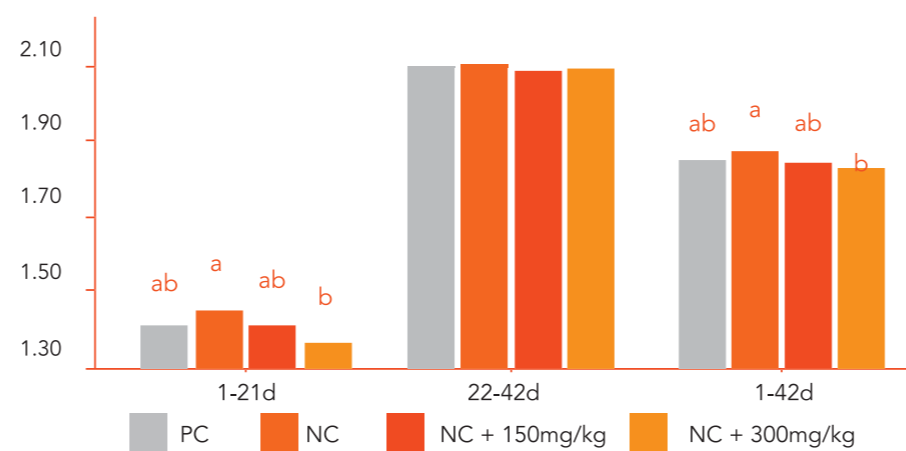
## 2. ADDITION IN LOW-PROTEIN DIETS

### VensaPro Improves the Production Performance of Broilers from 1D TO 42D.

#### Effects of VensaPro Addition in Low-protein Diet on ADG of Broilers



#### Effects of VensaPro Addition in Low-protein Diet on FCR of Broilers



Note: NC=PC-0.5%CP in Formula

## SPECIFICATION & COSTOMIZATION

Name	VensaPro
Type	Granule
Customization	Customized Protease Service

## COMPOSITION ACTIVITY

Acid-Protease	≥10,000U/g
Neutral-Protease	≥10,000U/g
Alkaline-Protease	≥50,000U/g
Usage	200-300g/T in complete feed.

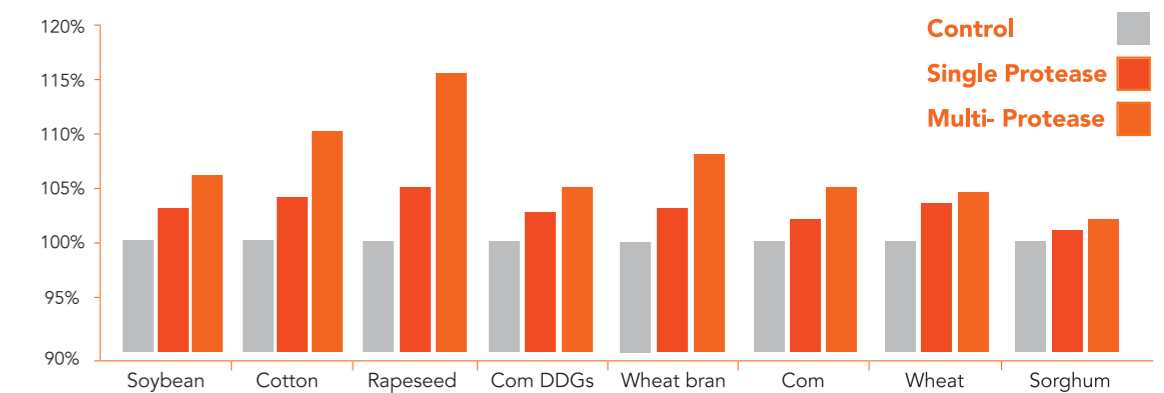
## PACKAGE & STORAGE

Package	25 kg/bag
Shelf life	12 months
Storage	Store below 25°C. Avoid direct sunlight, rain exposure, high temperature and high humidity

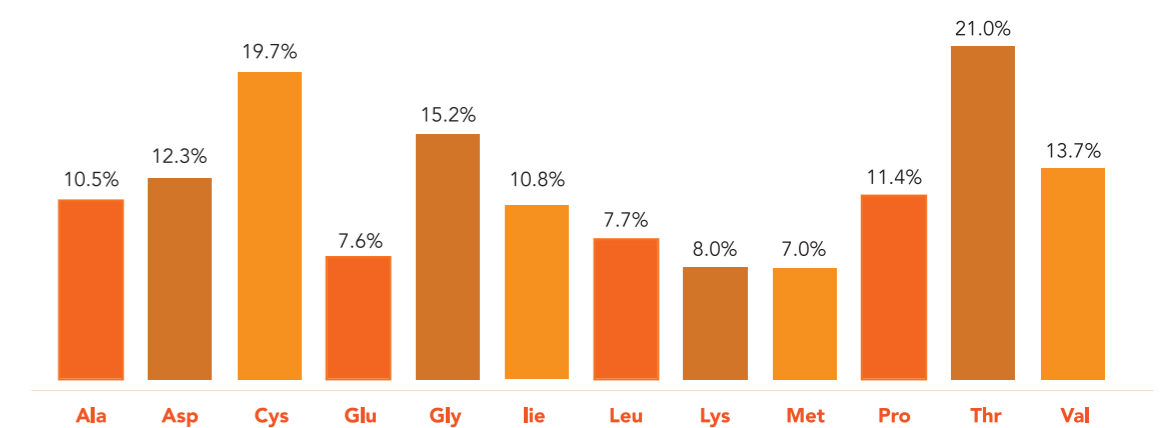


## HYDROLYSIS ABILITY OF PROTEASE TO FEED MATERIA

### Relative digestibility %

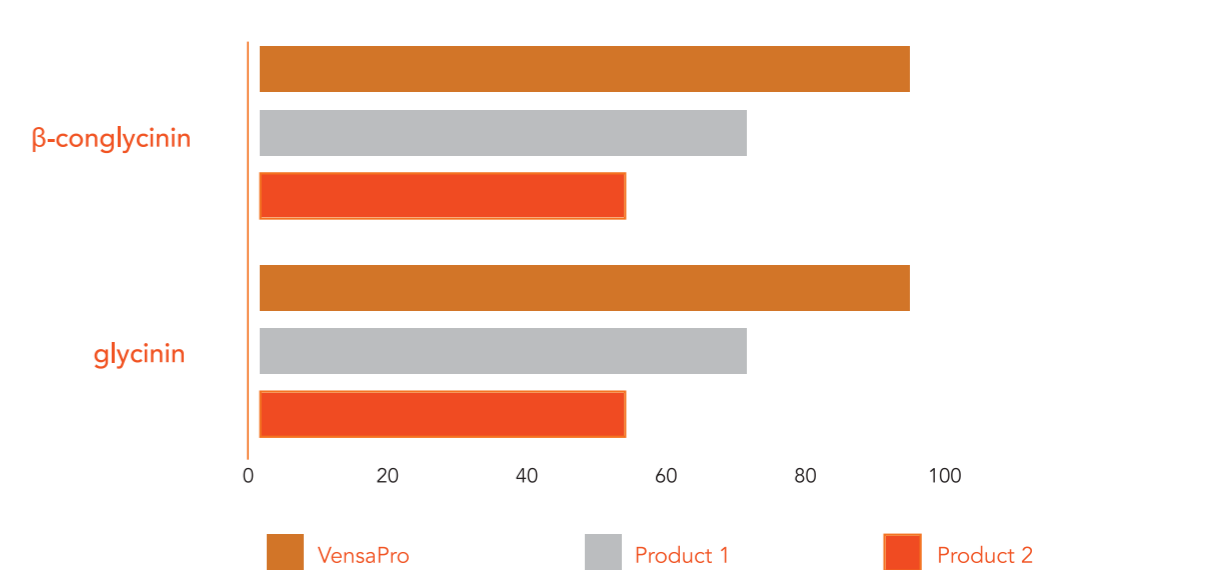


## IMPROVE THE NUTRIENT DIGESTIBILITY OF THE DAILY DIET



## REDUCE ANTI-NUTRITIONAL FACTORS AND IMPROVE INTESTINAL HEALTH

### Degradation Ability of VensaPro to Soybean Allergenic Protein



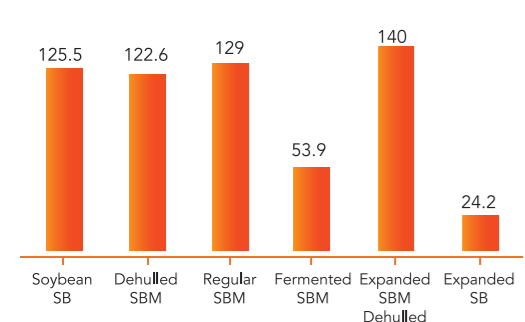
# Protease

## IMPORTANCE

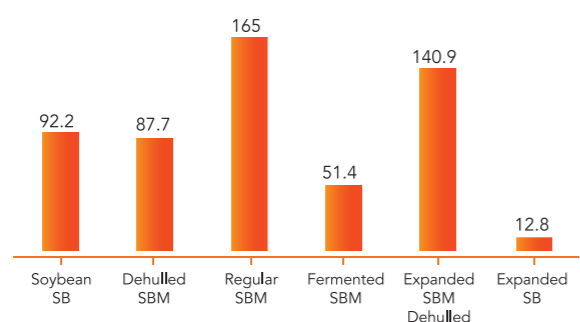
### The anti-nutritional factors in protein raw materials

Meal protein feeds contain anti-nutritional factors: glycinin and β-conglycinin trigger allergies, impair gut health and cause diarrhea, while trypsin inhibitors and lectins reduce protein digestibility.

### Glycinin



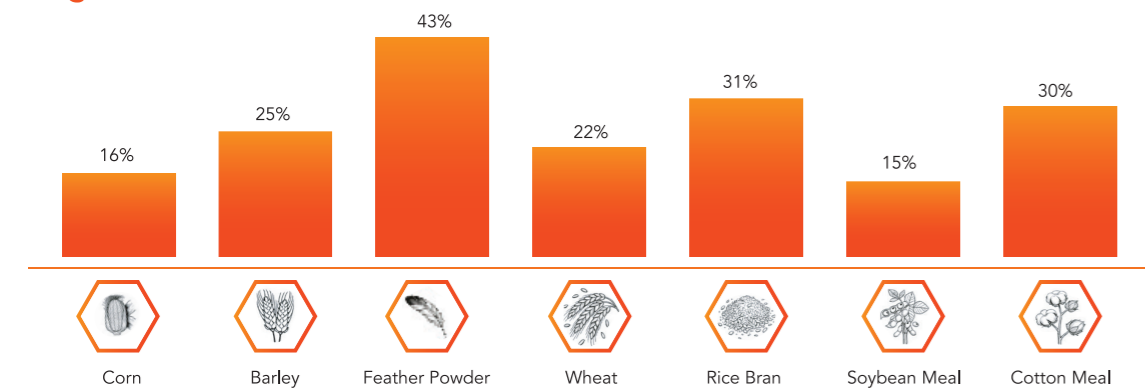
### β-Conglycinin



## LOW UTILIZATION OF PROTEINS

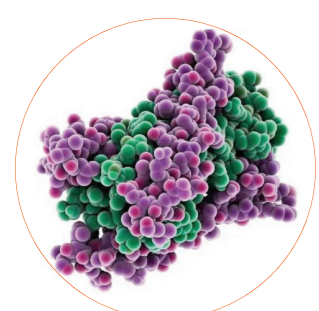
Animals have limited ability to digest protein; undigested protein is excreted, wasting costs while contaminating the environment.

## Undigested Protein in raw material

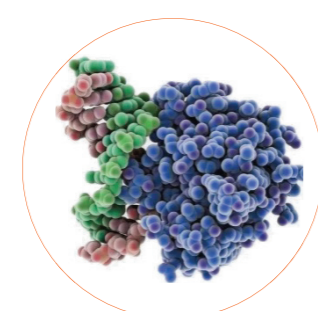


## TYPE OF PROTEASE

### Endogenous protease



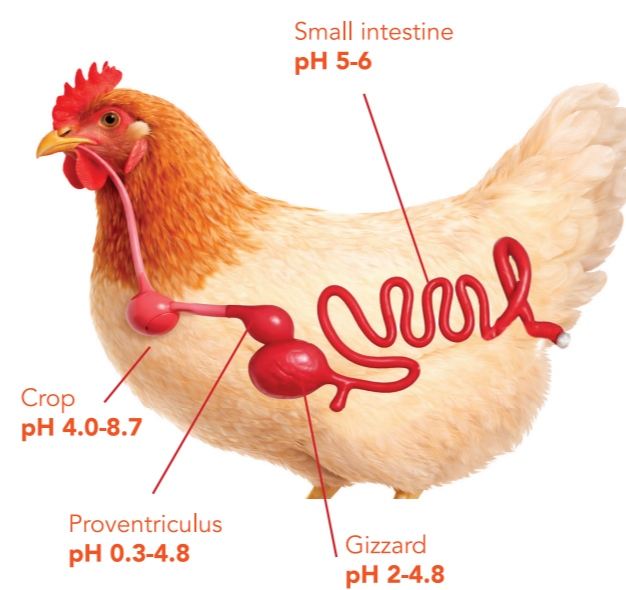
**TRYPSIN**  
Broad-spectrum  
acidic condition only



**PEPSIN**  
No broad-spectrum  
wide pH range

## EXOGENOUS PROTEASE

Types	Optimum pH	Primary acting site
Acidic Protease	2.0-4.5	Crop, Proventriculus, Gizzard
Neutral Protease	5.5-8.5	Duodenum, Jejunum, Ileum, Cecum
Alkaline Protease	9.0-11.5	Duodenum, Jejunum, Ileum, Cecum



VensaPro has good biological activity under different pH values in the stomach and intestines.

## ADVANTAGES OF VENSAPRO

### GOOD THERMOSTABILITY AND WIDE PH RANGE



80°C for 5min (water bath)



80°C and 85%RH for 3min



PH 2.5 for 90min

## BROAD SUBSTRATE SPECIFICITY

- Degrade more types of amino acid peptide bonds,
- Produce more easily digestible oligopeptide products,
- Offer greater flexibility in the selection of feed protein