PrOme™ - Max

Multistrain *Bacillus species* spores for Poultry

Maximizes Growth Maximizes Profitability

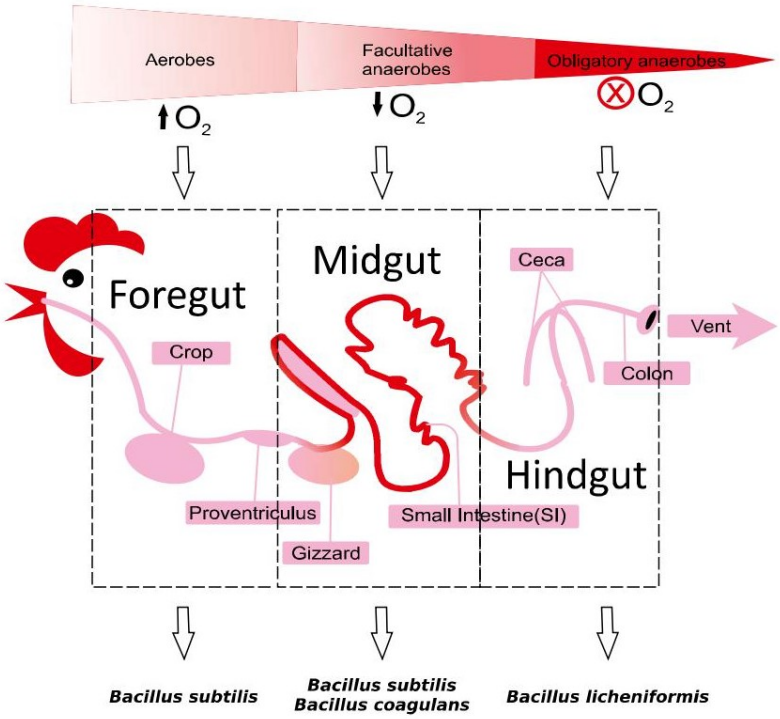
Prome Max is a unique researched proprietary blend of sporulating, viable, non-haemolytic & non-GMO multistrain *Bacillus species* providing a complete Crop-to-Cloaca Protection to be used for gut health & growth promotion in poultry

***Bacillus species* spores in Prome Max:**

- *Bacillus subtilis* (SAN 144 BS)
- *Bacillus coagulans* (SAN 135 BC)
- *Bacillus licheniformis* (SAN 136 BL)

Properties of *Bacillus* spores in Prome Max:

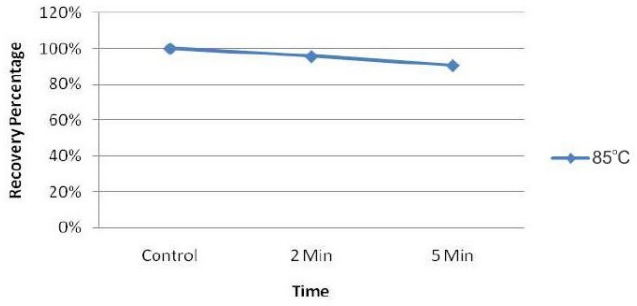
- *Bacillus subtilis* (SAN 144 BS) is a Gram Positive Aerobic & Facultative Anaerobic Probiotic highly effective in the foregut & midgut
- *Bacillus coagulans* (SAN 135 BC) is a Gram Positive Facultative Anaerobic Probiotic highly effective in the midgut
- *Bacillus licheniformis* (SAN 136 BL) is a Gram Positive Anaerobic Probiotic highly effective in the hindgut
- **Prome Max** is a combination of Multistrain Aerobic, Facultative Anaerobic & Anaerobic *Bacillus species* acting across the gut and providing complete Crop-to-Cloaca Protection



INVITRO STUDIES

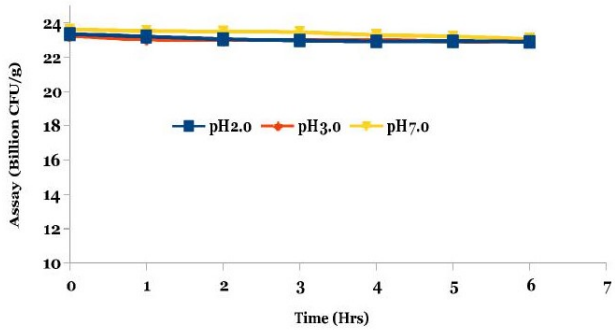
1. Thermostability of Prome Max:

- ➔ Recovery 86.9% at 85°C for 2 minutes
- ➔ Recovery 84.3 at 85°C for 5 minutes



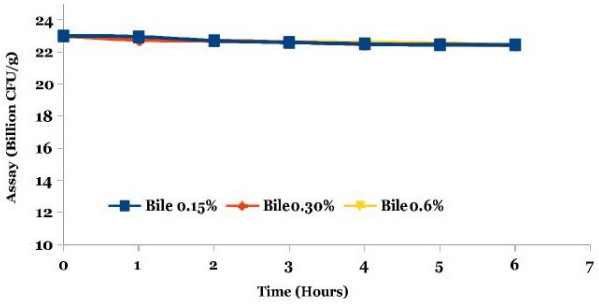
2. pH Tolerance (@ 6 Hour Incubation) of Prome Max:

- ➔ 98% Survival rate at pH 2
- ➔ 98.6% Survival rate at pH 3
- ➔ 97.5% Survival rate at pH 7



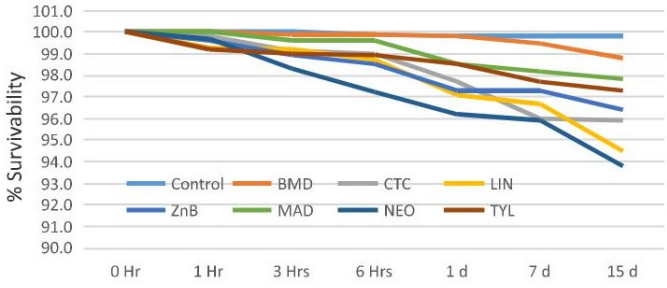
3. Bile Tolerance (@ 6 Hour Incubation) of Prome Max:

- ➔ 97.6% Survival rate at 0.15% Bile concentration
- ➔ 97.3% Survival rate at 0.30% Bile concentration
- ➔ 97.6% Survival rate at 0.60% Bile concentration



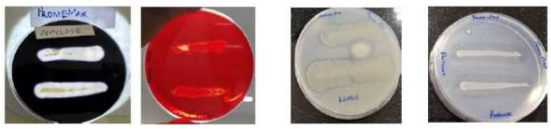
4. Antibiotic compatibility over 15 days of Prome Max:

- ➔ More than 94% Survival rate even with the toughest antibiotics



5. Enzymatic activity of Prome Max:

- ➔ Dominant Amylolytic, Proteolytic, Lipolytic & Cellulolytic activity



6. Antipathogenic activity of Prome Max:

- ➔ Zone of inhibition against *Clostridium perfringens*, *Salmonella enteritidis* & *E.coli*

Conclusions from INVITRO studies of Prome Max:

1. **Prome Max** can be effectively used in Pellet Feeds
2. **Prome Max** survives the different pH of the poultry gut
3. **Prome Max** is not degraded by the bile acids produced
4. **Prome Max** is compatible with antibiotics given in feed
5. **Prome Max** has proven enzymatic activity helping in nutrient absorption
6. **Prome Max** is proven anti-pathogenic and prevents Necrotic Enteritis

INVIVO STUDIES / FIELD TRIALS

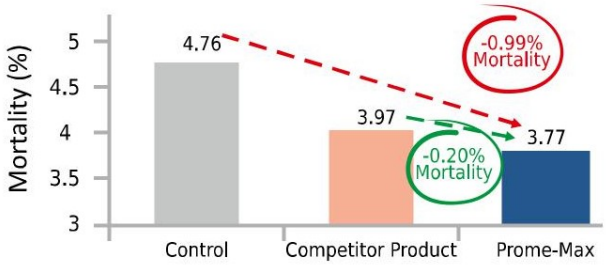
Comparative field trial data of **Prome Max** *vs*. Competitor Probiotic from a Broiler Farm

1. The effect of Prome-Max *vs* Competitor Product on 40 days of broiler growth performance

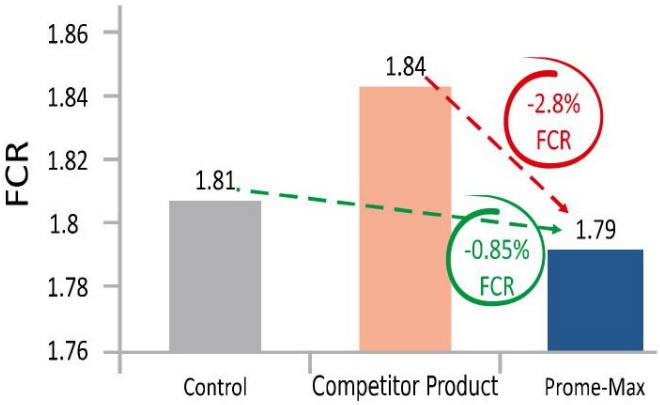
Treatment	Control**	Competitor Product	Prome-Max
Feed intake (g/bird)	3447	3560	3487
Body weight (g/bird)	1909	1933	1948
FCR (g/g)	1.81	1.84	1.79
FCR corrected 2kg (g/g)	1.83	1.86	1.81
Mortality (%)	4.76	3.97	3.77
EEF	251	252	261
ROI	3.3* w.r.t control		

*The reduction in medication costs were not taken into account to calculate the ROI.
** The control group feed was supplemented with Enramycin

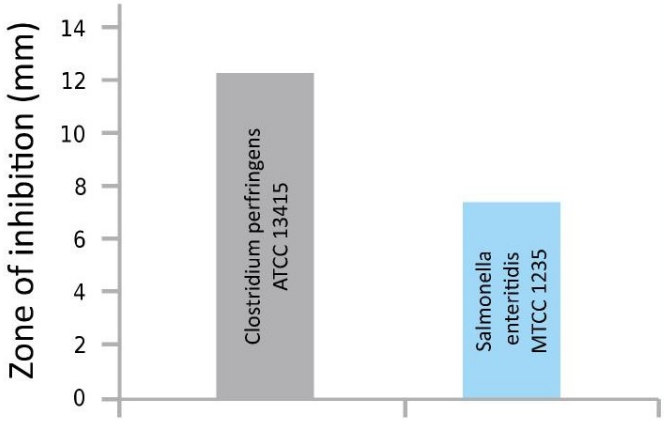
2. Reduction in Mortality rate after addition of Prome-Max to broiler diet



3. Improvement in FCR after addition of Prome-Max to broiler diet



4. Antagonistic spectrum of Prome-Max against pathogenic strains



Conclusions form Field Trials:

1. **Prome Max** Increase Body Weight by 15g and 39g respectively as compared to Competitor Probiotic & Control
2. **Prome Max** Reduces Mortality by 0.20% and 0.99% respectively as compared to Competitor Probiotic & Control
3. **PROME MAX** Improves FCR by 2.8% and 0.85% respectively as compared to Competitor Probiotic & Control
4. **Prome Max** has Significant action against Necrotic Enteritis caused by *Clostridium perfringens*

Mechanism of Action:

- **Prome Max** contains a combination of Aerobes (*Bacillus subtilis*) , Facultative Anaerobes (*Bacillus subtilis + Bacillus coagulans*) & Anaerobes (*Bacillus licheniformis*) selected for their effectiveness to thrive and proliferate in the high and low-oxygen environment across the entire poultry gut offering Crop-to-Cloaca Protection
- **Prome Max** prevents the growth of pathogens by producing Short Chain Fatty Acids (SCFA) such as Lactic acid, Butyric acid etc. & Bacteriocins like Coagulin, Amicoumacin, Subtilisin, Bacitracin etc..
- **Prome Max** produces enzymes like Lipases, Amylases, Proteases, etc. which improves digestibility & energy conversion of the feed

Key Benefits:

- **Prome Max** provides Complete Protection from Crop-to-Cloaca
- **Prome Max** has proven activity against *Clostridium perfringens, Salmonella enteritidis & E.coli*
- **Prome Max** Promotes & Modulates Healthy Gut Microflora
- **Prome Max** ensures Better Weigh Gains, FCR & Higher ROI

PrOme™-Max

Contains Propreitary Sporulating Aerobic, Facultative Anaerobic & Anaerobic Strains of *Bacillus subtilis* (SAN 144 BS), *Bacillus coagulans* (SAN 135 BC) & *Bacillus licheniformis* (SAN 136 BL) which thrive & are highly effective in the foregut, midgut & hindgut – compatible with Antibiotics / Feed Additives / Acidifiers / Enzymes / Minerals / Disinfectants

Available as both
FEED ADDITIVE & WATER SOLIBLE in

- 1 Billion CFU/g,
- 2 Billion CFU/g,
- 4 Billion CFU/g,
- 8 Billion CFU/g,
- 20 Billion CFU/g

& Customized Potencies

Suggested Feeding / Inclusion Rate:

Feed

- **Prome Max 4B** (FS)

- Chick Crumble: 200g - 250g / MT
- Grower Crumble: 150g - 200g / MT
- Layer & Breeder: 100g - 150g / MT

Physical appearance: Free flowing, off white colour powder

Storage: Store in cool & dry conditions protect from direct sunlight

Shelf life: Best before 24 months from the month of manufacture

Packing: Available in 25kg & Customized Packs