

Dear Reader,

Successful acidification must promote growth of bird and discourages the growth of pathogenic organisms. Several acidifiers have been developed to reduce gut pH with moderate success. Raafres formulation successfully performs & ensures the acidification of GI tract contents from crop to cloaca, let us have a review

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Raafres®-

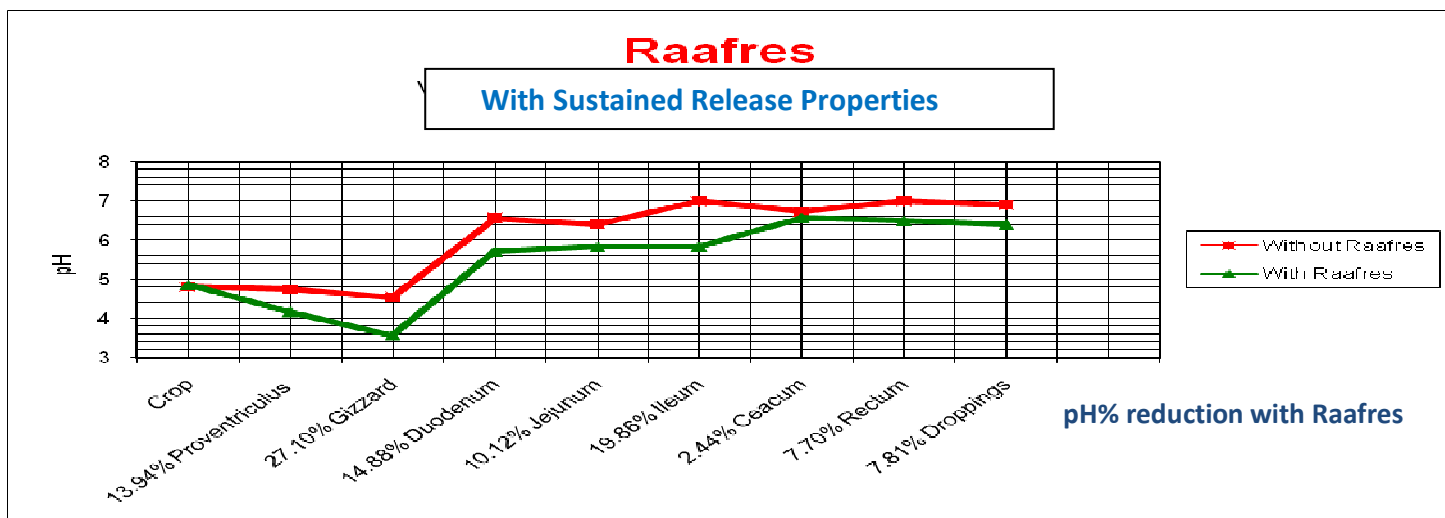
September 2012

The Feed Acidifier with sustained release properties:

There are 10 times more bacterial cells in the gut of the bird than all cells of chicken. Newly hatched chicks get infected from the environment immediately after hatch and upon their placement at farm. These microbes compete with the birds for essential nutrients and cause economic losses to poultry farmers in the form of reduced growth, production & health. pH is considered as critical factor for the multiplication of pathogenic organisms & molds. **Pathogenic bacteria grow mostly in hindgut of bird, but not in case of bird fed with Raafres which keeps GI tract acidifies from crop to cloaca,**

prevents establishment and growth of pathogenic bacteria like E coli, salmonella, Pseudomonas etc-. Dietary acidification is essential to inhibit the pathogenic bacteria & for reduction of possible toxic bacterial metabolites.

Inorganic acids a great risk: Many formulators are using inorganic acids as commercial acidifiers to economies. The inorganic acid like **hydrochloric acid & orthophosphoric acid** etc- are **not safe for handle**, they have **zero energy value** & may cause corrosion and damage to bird crop and intestinal villi



Approximate pH range of microbial growth:

Organism	Minimum	Optimum	Maximum
Molds	1.5-3.5	4.5-6.8	8.0-11.0
Aspergillus	-	3.0-6.8	-
E.coli	4.3-4.4	6.0-8.0	9.0-10.0
Salmonella (most of)	4.0-5.0	6.0-7.5	9.00
Pseudomonas aeruginosa	4.4-5.6	6.6-7.0	8.0-9.0

The rate which organic acids kill bacteria depends on the time of exposure and specific properties of acid used. Raafres with sustained release properties unlock profits to farmers by productive 8 hours of complete performance. Raafres acidification throughout GI tract helps controlling growth of pathogenic organisms by lowering pH.

Organic acids used in Raafres exert their growth inhibiting effect on stomach & gut microbes through pH reduction, Acidified GI tract is unfavorable for the growth of pathogenic bacteria and moulds. Use of Raafres has been proven to be significant help in improving performance of birds.