

# Tasteless and non-reactive tannic acid preparation Anti-enterovirus, Prevent feed dropping, Total ZnO replacement

### Tannin ≥ 80%

- 1 Plant-based astringent, reduce feces moisture.
- 2 Anti-enterovirus; prevents feed passage syndrome.
- 3 Replaces ZnO (3 kg Tanica-80 = 2 kg ZnO).
- 4 Non-irritating and non-reactive with metal ions.
- 5 Non-reactive, non-caking in premix.





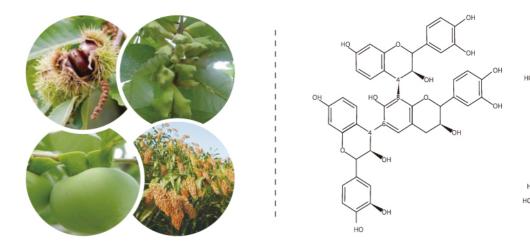




Website: www.insighterbt.com

#### 1.Tanica-80: tasteless tannin

- ① Tannin is a class of polyphenols derived from plants.
- ② Tanica-80 is a tasteless, non-irritating and non-reactive feed tannin preparation developed by Insighter based on innovative processing technique.
- ③ Tanica-80 mainly used for anti-gastrointestinal virus, prevent feed passage syndrome,improve fecal formability and total replace ZnO.



## 2. Comparison of characteristics of different types of tannin products

Product	Common tannin	Coated tannin	Tanica-80
Main process	Extracted from plants	Coated by lipid materials	Produced under innovative technique
Taste	Astringency	Astringency	Tasteless
High dosage on feed intake	Decreased	Decreased	Unaffected
Irritation to hands and skin	Strong	Partly improved	Non-irritating
Darken in liquid diets	Yes	Yes	No
Reactiveness	High	Medium	Not have
Cost performance	Medium	Low	High

## 3. Application effects

Table 1. Application effects of Tanica on nursery piglets

Items	Negative control	ZnO 1	ZnO 2	Tanica	ZnO+Tanica
Number	5×10	5×10	5×10	5×10	5×10
ZnO (g/t)	=	2,000	3,000	2,000	2,000
Tanica (g/t)	-	-	-	1,000	2,000
Initial BW (kg)	8.32±0.57	8.29±0.62	$8.31 \pm 0.48$	8.30±0.58	$8.30 \pm 0.48$
ADFI (g)	498±68ª	570±56⁵	583±48 <sup>b</sup>	578±50 <sup>ы</sup>	587±51 <sup>b</sup>
ADG (g)	252±39 <sup>a</sup>	322±32 <sup>b</sup>	353±26°	340±28°	358±29°
FCR	$1.98 \pm 0.11^{a}$	$1.77 \pm 0.10^{6}$	1.65±0.09°	1.70±0.09°	1.64±0.10°
Diarrhea rate (%)	25.24±1.56ª	15.36±1.23 <sup>b</sup>	7.09±0.98°	10.05±1.02°	6.48±0.96°

Note: Guangdong, China, 2016.

Table 2. Application effects of Tanica on growing pigs

Items	Negative control	Tanica 1	Tanica 2	Tanica 3
Number	5×10	5×10	5×10	5×10
Tanica (g/t)	-	500	1,000	2,000
Initial BW (kg)	$15.38 \pm 0.77$	15.44±0.76	15.32±0.69	$15.36 \pm 0.71$
ADG (g)	450±51 <sup>a</sup>	477±66 <sup>b</sup>	492±50 <sup>b</sup>	507±61°
ADFI (g)	930±86ª	935±81°	944±76ab	963±90 <sup>b</sup>
FCR	2.07±0.15ª	1.96±0.14b	1.92±0.15b	1.90±0.09°
Diarrhea rate (%)	15.68±1.53°	11.60±1.28b	8.32±1.02b	4.46±0.98°

Note: Guangdong, China, 2016.

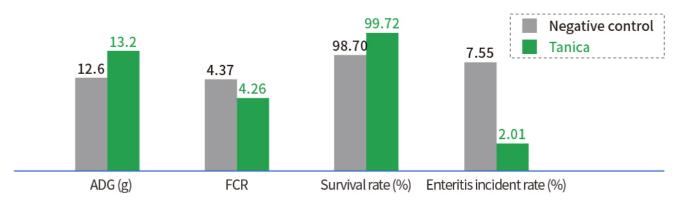
50 day-old of Duroc × Landrace × Large pigs were selected for 30 days trail fed with commercial feed.

Table 3. Application effects of Tanica on yellow-feather broilers

Items	Negative control	Tanica 1	Tanica 2
Number	6×30	6×30	6×30
Tanica (g/t)	-	500	1,000
AFBW (g)	395±13°	413±15ab	428±10 <sup>b</sup>
ADG (g)	17.0±0.71ª	$17.6 \pm 0.51$ ab	18.2±0.45 <sup>b</sup>
ADFI (g)	$31.1 \pm 0.90$	31.3±0.75	$31.9 \pm 0.52$
FCR	$1.83 \pm 0.10^{a}$	$1.78 \pm 0.07^{ab}$	1.75±0.05 <sup>b</sup>

Note: Guangdong, China, 2016.

1 day-old yellow-feather broilers, 3 treatments  $\times$  6 replicates  $\times$  30 broilers for 3 weeks trail.



Note: (1) Control group: no antibiotics. Tanica group: 1 kg/t Tanica. (2) Experimental animals: 9 week-old yellow-feather broilers (2×5,000) for 4 weeks trail.

Figure 1. Application effects of Tanica on yellow-feather broilers

Table 4. Application effects of Tanica on AA broilers

Items	Negative control	Tanica 1	Tanica 2
Number	6×30	6×30	6×30
Tanica (g/t)	-	500	1,000
Final BW (g)	814±25ª	836±20ab	861±23b
ADG (g)	36.9±4.22°	37.9±4.33bc	39.1±4.32ª
ADFI (g)	52.0±2.01	52.3±2.14	52.8±1.84
FCR	1.41±0.22°	1.38±0.33ab	1.35±0.32b

Note: Guangdong, China, 2016.

1 day-old AA broilers, 3 treatments  $\times$  6 replicates  $\times$  30 broilers for 3 weeks trail.

Table 5. Effect of Tanica on the performance of Ross 708 broilers (USA, 2022)

Items -		- Dualua		
	Control	BMD	Tanica	– <i>P</i> -value
Initial body weight, g	39.3±0.98	39.3±0.87	38.8±0.75	0.224
Day 1 to 14				
Average daily gain, g	$25.83 \pm 1.37$	25.15±0.77	25.46±0.02	0.333
Average daily feed intake, g	23.21±1.35ª	24.98±1.60b	22.55±0.06a	0.001
Unadjusted FCR	$1.02 \pm 0.02^a$	$1.13\pm0.06^{b}$	$1.00\pm0.03^{a}$	< 0.001
Day 15 to 28				
Average daily gain, g	54.57±3.88ª	59.34±3.00b	58.59±2.29b	0.001
Average daily feed intake, g	86.43±3.39	$88.60 \pm 4.41$	87.87±2.80	0.334
Unadjusted FCR	$1.59 \pm 0.07^{a}$	$1.50 \pm 0.08$ <sup>b</sup>	1.50±0.05b	0.003

Note: Virginia Tech, USA, Oct 7th - Nov 11th.

1332 Ross 708 chicks (3×12×37) were reared on floors for 42 days trail.

Control: maize and soya meal diet (NRC, 1994).

BMD group: 50ppm bacitracin methylene disalicylate (BMD). Tanica group: 750ppm (day 1-14), 500ppm (day 15-28).

Unadjusted FCR: (feed consumption)/(total weight of live broilers).

Mortality adjusted FCR: (feed consumption)/(total weight of live broilers +total weight of dead broilers).

## 4. Recommended dosage

Species	Stage	Dose (g/t)	Species	Stage	Dose (g/t)
Swine	Weaned piglet	1,000	Chicken	Starter	300 - 750
(keep ZnO)	Nursery	1,000		Grower	300 - 500
R	Grower	500		Finisher	200 - 300
	Finisher	250	•	Layer	200 - 300
Swine	Creep	3,000		Breeder	300 - 500
(remove ZnO)	Nursery	2,000	Duck 🎤	Meat duck / ayer	200 - 300
Ruminant	Calf	500		Breeder	300 - 500
	Lamb	500	Aquatic animal		300 - 500
		1,000 (concentrate)	Rabbit		500 - 750
		(10-20 g/d/herd)	Fur animal		500 - 750
FIR	Fattening / Dairy sheep and goats	1,000 (concentrate) (3-5 g/d/herd)			

3kg/t of Tanica-80 = 2kg/t of ZnO.



Guangzhou Insighter Biotechnology Co., Ltd.

