

A background image of a microscope with a red curved overlay at the bottom left.

Summary Report Trial ButiPEARL™ in Broiler

DMC – Farm Rembun
2022

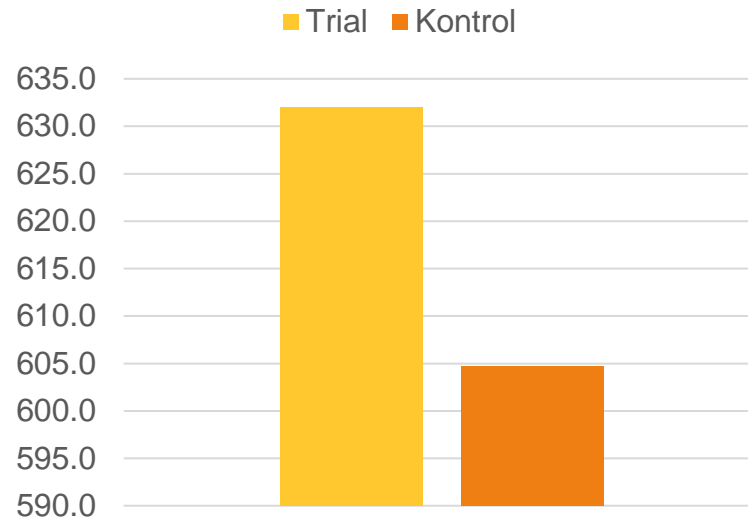


INFORMASI TRIAL

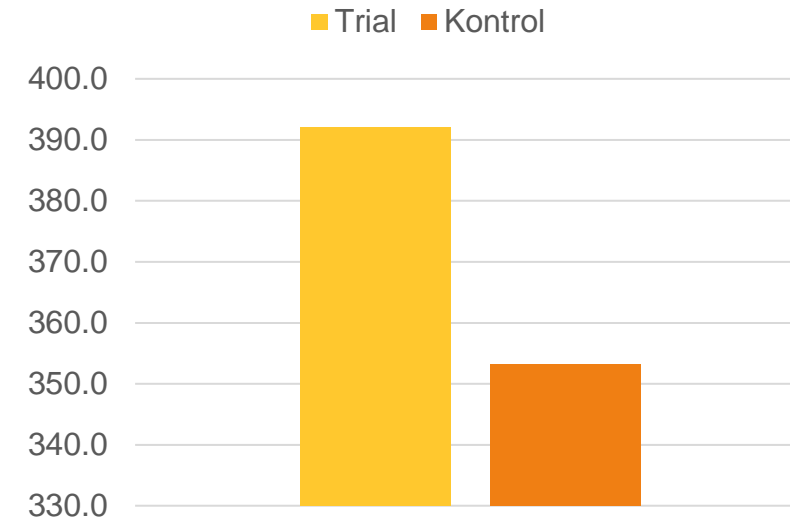
| | |
|--------------------|--|
| Objective trial | : ➤ Mengetahui penyerapan asam butirat dapat mencapai hingga usus bagian belakang (ileum) ➤ Pengganti AGP di pakan prestarter |
| Jenis ayam | : Broiler |
| Lokasi | : Farm Rembun |
| Durasi trial | : 0 – 16 hari |
| Kelompok | : 1A: Trial - ButiPEARL 1B: Kontrol - AGP |
| Sampling histopath | : Umur 9 hari |

HASIL HISTOPATH

Panjang Vili Jejunum



Panjang Vili Ileum

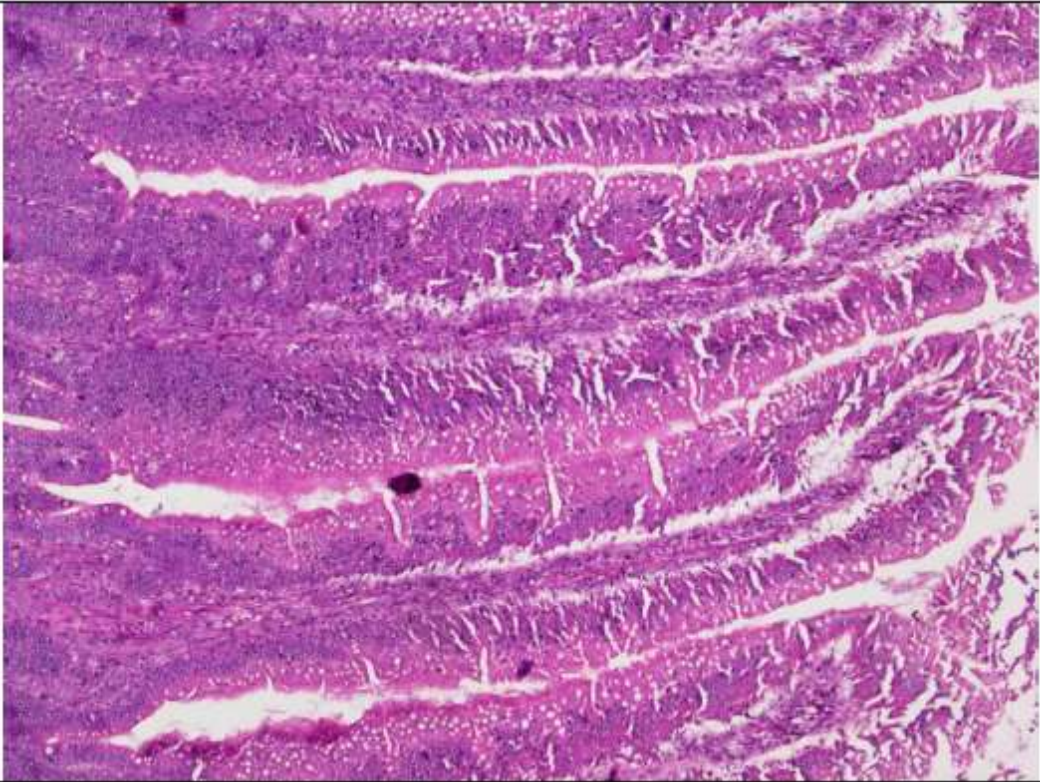
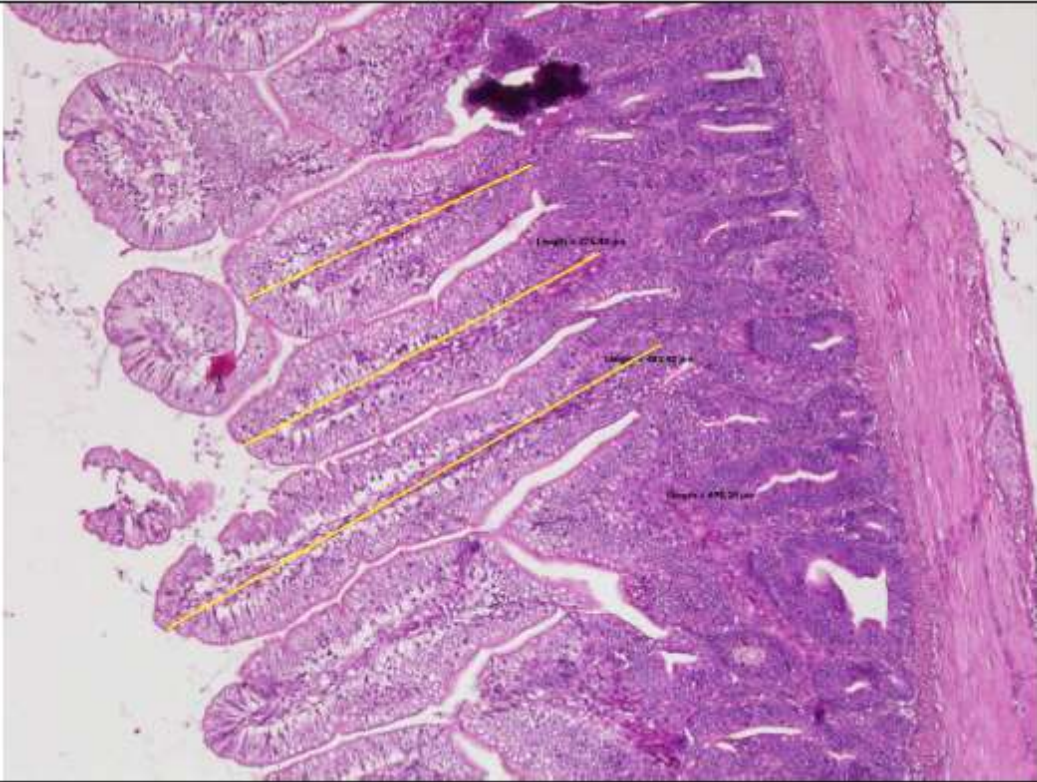


| Bagian Usus | Rataan Panjang Vili Usus (µm)* | | | Rataan Panjang Usus** | |
|-------------|--------------------------------|---------|------|-----------------------|---------|
| | Trial | Kontrol | Gap | Trial | Kontrol |
| Jejunum | 632.0 | 604.7 | 27.3 | 108 | 112 |
| Ileum | 392.2 | 353.2 | 39.0 | | |

*: pengukuran dari 5 LP
 **: jumlah sampel 3 ekor ayam

HASIL HISTOPATH

Jejunum



HASIL HISTOPATH

Ileum



HASIL PERFORMANCE

| Ket | Body Weight (g) | | Feed Intake (g) | | Depleksi (%) | | FCR | | IP | |
|------|-----------------|-----------------|-----------------|-----------------|---------------|-----------------|---------------|-----------------|---------------|-----------------|
| Umur | 1A (trial) | 1B (kontrol) | 1A (trial) | 1B (kontrol) | 1A (trial) | 1B (kontrol) | 1A (trial) | 1B (kontrol) | 1A (trial) | 1B (kontrol) |
| 0-7 | 183 | 181 | 42.67 | 42.85 | 0.14 | 0.17 | 1.049 | 1.065 | 306.244 | 301.734 |
| 0-16 | 590 | 590 | 66.6 | 66.91 | 0.87 | 0.85 | 1.204 | 1.222 | 249.213 | 106.219 |

SUMMARY

- ✓ Pemberian asam butirat (ButiPEARL™) bisa mencapai hingga usus bagian belakang yang ditandai dengan panjang vili usus pada ileum lebih panjang daripada kontrol
- ✓ Performance ayam pada minggu pertama pada kelompok trial lebih baik dan hingga umur 16 hari FCR dan IP pada kelompok trial lebih baik daripada kelompok kontrol

HEAT STABILITY BUTIPEARL™

Background:

- ButiPEARL, batch number 2203115223 was obtained from KAA Finished Goods Warehouse (FGWH).
- Product heat stability was tested by subjecting the ButiPEARL product to heat condition as described in table 1 below.

Table 1: Sample information

| Sample Description | Treatment Protocol |
|--------------------|---|
| Control | Untreated sample from FGWH. |
| Heat treated | Pre-weight sample incubated in pressure cooker set at 90 – 95 Degree C with pressure at an estimate 30 psi*. Total heating time was 1 minutes and 30 seconds. |

Note: Pressure 30 psi in pressure cooker was based on the estimation reference from <https://www.serious-eats.com/how-pressure-cookers-work>.

ButiPEARL™ stabil pada suhu panas (90 – 95° C)

Results:

Table 2: Calcium Butyrate Recovery from ButiPEARL

| Sample Description | Calcium Butyrate recovered (%) |
|------------------------------|--------------------------------|
| Control sample | 56 |
| Steam and pressurized sample | 56 |

Note: The minimum specification of Calcium Butyrate for ButiPEARL is 45%.

Summary:

- The calcium butyrate level recovered from both control and heated ButiPEARL was found to be the same at 56%.
- This result indicated that ButiPEARL was very stable under steam and pressurized condition.

TERIMA KASIH

