the native volatile components in the milk, influenced by the pasteurization and fermentation processes (Al-Rowaily, 2008). The main flavor compounds found in yoghurt include acetaldehyde, acetoin, diacetyle, acetic acid, propionic and butyric acids (Baglio, 2014). Furthermore, milk of goats produced under sanitary conditions will be free from off-flavour. And, the same factors that adversely affect the flavour of cow's milk also affect goat's milk. However, researchers advise that producers of goat milk must be certain that the buck (male goat) is kept at least 50 m away from the lactating doe (female goat) to prevent the milk from absorbing the buck's odor (Eissa et al., 2010; Ekram and El-Zubeir, 2011). On the other hand, the appearance of the yoghurt is a combination of the color and the visual separation of the whey. It has been reported that the goat is essentially 100 percent efficient in converting carotene into vitamin A, a process that makes goat milk whiter in colour than that of cow. It follows then, that the yoghurt made from the milk is very whitish in colour. The curd of goat milk appeared like small light and friable flakes that dissolved easily upon stirring. Goat milk yoghurt was observed to be more delicate and thinner than the cow milk yoghurt in other words, the yoghurt from the goat's milk was slightly less firm in consistency than that of the cow's milk. These observations are in agreement with those made by other researchers including Janness (1980), Jumah et al. (2001), Maina (2008), Cheng (2010), Eissa et al. (2010), Ekram et al. (2011) and El-Zubeir et al. (2012).

Table 3: Microbial quality of yoghurt produced from *B. linens* and commercial starter culture

Microorganisms	**Goat milk**	Cow milk	**Control**
Total plate count (cfu/ml)	2.6×10^4	2.8×10^4	3.4×10^6
Coliform (faecal)	0.00	0.00	0.00
Salmonella count	1.2×10^2	1.0×10^4	1.4×10^2
Yeast count	$<1.0 \times 10^2$	$<1.1 \times 10^4$	$<1.2 \times 10^2$
Mould count	0.00	0.00	0.00

Means obtained from triplicate determinations ($p<0.05$)

The mean scores of the microbial counts: total plate count, *coliform, salmonella,* and mould and yeast counts, are presented in Table 3. The average total bacteria counts (TBC) of yoghurt produced from *B.linens* ranged from 2.6×10^4 -3.4×10^6 cfu/ml respectively. The TPC consists

dominantly of the lactic acid bacteria (LAB). The smaller numbers of other microorganism recorded: *salmonella,* and yeast, is thought to be as result of the antimicrobial effects of the lactic acid produced by the LAB, causing the pH of the growth environment to decrease to levels quite unfavorable for the growth of those organisms (Pazakova et al., 1997; Lee and Chen, 2004). The *coliforms* were not detected in both samples whereas; Salmonella and Yeast were present in both samples. This could be as a result of poor hygiene level of milk handlers. According to the FAO (2008) guideline and the specification given by the ICMSF, the milk should contain less than 3.0 $x10^4$ cfu/ml and 5.0 x 10^4cfu/ml respectively. Meanwhile, it is extremely important that microbial tests are carried out to ensure that bacterial activity in raw milk is of acceptable level, and that no harmful bacteria remain in the processed products. Furthermore, milk processing of any kind must be done under carefully controlled hygienic conditions. After the incubation period of 4 h, the yoghurt was cooled and stored at below 10°C. This was necessary to slow the multiplication of any contaminating organism.

4.0 Conclusion

The research work revealed that the *B. linens* isolated and screened for the presence of virulence genes such as; *B. linens* (sample) and *B. linens* (Genomic DNA) using specific primers and DNA from *B .linens* revealed the absence of virulence in all the genes. The physico-chemical quality of yoghurt produced from brown goat milk (Hakuya) was significantly difference ($p>0.05$) from yoghurt produced cow milk yoghurt using *B. linens* as starter culture. The yoghurt produced from brown goat milk was recorded higher value in terms of its protein, viscosity, pH and titratable acidity content. The yoghurt produced from commercial starter ingredient (*L. bulgaricus and S.thermophilus*) generally accepted by panelists than yoghurt produced *B.linens*. Coliform and mould are not detected in all the production and small counts of other microorganisms were recorded, these was as result of proper hygiene of the environment and handlers. Efforts should be intensified toward commercial production of yoghurt and other dairy products using *B. linens* as the starter ingredient and the awareness of the full usage of *B. linens* as starter culture for yoghurt production at household level should be promoted.

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