

GERM WHEAT: AN UNIQUE SUBSTANCE FOR EXCITATION OF A COW FOR BREEDING

ASHOKEHAZRA

sA.K.P.C. Mahavidyalaya, Subhasnagar, Bengai, Hooghly

ABSTRACT

The present work describes how a medium health cow is excited for breeding with 200gms germ wheat within two weeks? I work on three different substances like germ wheat, cotton seed cake and medicine Agrimin i. But it was miracle that among all these substances germ wheat show quick result. Wheat is easily available in market. Germ wheat preparation is too much easy. Germ wheat is cheaper than the other two substances. As medicine cost is so high, germ wheat can play better excitation substance in our domestic purposes.

KEYWORDS: Agrimini, Breed, Cotton Seed Cake, Cow, Germ Wheat

INTRODUCTION

Cattle—colloquially **cows**—are the most common type of large domesticated ungulates. They are a prominent modern member of the subfamily Bovinae, are the most widespread species of the genus *Bos*, and are most commonly classified collectively as **Bostaurus**. Cattle are raised as livestock for meat (beef and veal), as dairy animals for milk and other dairy products, and as draft animals (oxen or bullocks that pull carts, plows and other implements). Other products include leather and dung for manure or fuel. In some regions, such as parts of India, cattle have significant religious meaning. From as few as 80 progenitors domesticated in southeast Turkey about 10,500 years ago [1], according to an estimate from 2003, there are 1.3 billion cattle in the world [2]. In 2009, cattle became one of the first livestock animals to have a fully mapped genome [3]. Some consider cattle the oldest form of wealth, and cattle raiding consequently one of the earliest forms of theft.

Cattle were originally identified as three separate species: *Bostaurus*, the European or "taurine" cattle (including similar types from Africa and Asia); *Bos indicus*, the zebu; and the extinct *Bos primigenius*, the aurochs. The aurochs is ancestral to both zebu and taurine cattle. Now, these have been reclassified as one species, *Bostaurus*, with three subspecies: *Bostaurus primigenius*, *Bostaurus indicus*, and *Bostaurus Taurus* [4-5].

Complicating the matter is the ability of cattle to interbreed with other closely related species. Hybrid individuals and even breeds exist, not only between taurine cattle and zebu (such as the sanga cattle, *Bostaurus africanus*), but also between one or both of these and some other members of the genus *Bos* – yaks (the dzo or yattle [6]), banteng, and gaur. Hybrids such as the beefalobreed, can even occur between taurine cattle and either species of bison, leading some authors to consider them part of the genus *Bos*, as well [7]. The hybrid origin of some types may not be obvious – for example, genetic testing of the Dwarf Lulu breed, the only taurine-type cattle in Nepal, found them to be a mix of taurine cattle, zebu, and yak [8]. However, cattle cannot successfully be hybridized with more distantly related bovines such as water buffalo or African buffalo.

The aurochs originally ranged throughout Europe, North Africa, and much of Asia. In historical times, its range became restricted to Europe, and the last known individual died in Masovia, Poland, in about 1627[9]. Breeders have attempted to recreate cattle of similar appearance to aurochs by crossing traditional types of domesticated cattle, creating the Heck cattle breed.

Cattle did not originate as the term for bovine animals. It was borrowed from Anglo-Norman *catel*, itself from Medieval Latin *capitale* 'principal sum of money, capital', itself derived in turn from Latin *caput* 'head'. Cattle originally meant movable personal property, especially livestock of any kind, as opposed to real property (the land, which also included wild or small free-roaming animals such as chickens they were sold as part of the land)[10]. The word is a variant of *chattel* (a unit of personal property) and closely related to *capital* in the economic sense [11]. The term replaced earlier Old English *feoh* 'cattle, property', which survives today as *fee* (cf. German: *Vieh*, Dutch: *vee*, Gothic: *faihu*).

The word "cow" came via Anglo-Saxon *cū* (plural *cȳ*), from Common Indo-European **gʷōus* (genitive **gʷowés*) = "a bovine animal", compare Persian *gāv*, Sanskrit *gāu-*, Welsh *buwch*[12]. The plural *cȳ* became *ki* or *kie* in Middle English, and an additional plural ending was often added, giving *kine*, *kien*, but also *kies*, *kuin* and others. This is the origin of the now archaic English plural, "kine". The Scots language singular is *coo* or *cou*, and the plural is "kye".

Historically, there was little distinction between dairy cattle and beef cattle, with the same stock often being used for both meat and milk production. Today, the bovine industry is more specialized and most dairy cattle have been bred to produce large volumes of milk. The United States dairy herd produced 83.9 billion kg (185 billion lbs) of milk in 2007, up from 52.6 billion kg (116 billion lbs) in 1950[13-14], yet there only about 9 million cows on U.S. dairy farms about 13 million fewer than there were in 1950[14].

To remain in the breeding herd, a cow must produce and successfully raise a calf each year and successfully conceive within 90 days of parturition. To ensure that the cow has the best possible chance of fulfilling these requirements, she must be in optimum condition at mating. The nutritional status of a cow is reflected in her body condition, and therefore can be controlled, to a large extent. Cows that are either too thin or too fat at mating are less likely to conceive. Calving interval may also be affected by the condition of the cow at mating.

Here we observe upon three cows who are not responding the breeding of new calf. Three excitement substances are used to perform this experiment such as, germ wheat, cotton seed cake, Agrimin i tablet.

EXPERIMENTAL

Materials

Germ wheat, dry cotton seed cake, Agrimin i tablet were use to perform this work.

Method

At first, three mature cows who are not responding the breeding of new calf were collect. Then 200 gms of germ wheat was used for cow1, 200 gms dry cotton seed cake was used for cow2 and lastly Agrimin i tablet was used for cow3 for 14 days.

Preparation of Germ Wheat

At first wheat are dissolved in fresh water and then it was taken for 6 hours. After that water was removed from it. Then it was taken in a bowl with lid for germination of wheat for 6 hours. It is called germ wheat.

RESULTS AND DISCUSSIONS

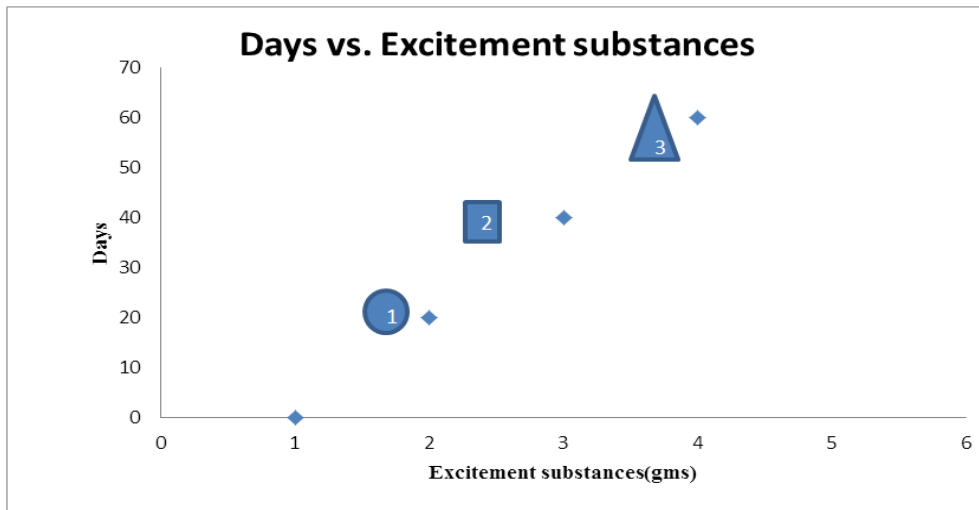


Figure 1: Plot of Days vsExcitement Substances

Where 1= germ wheat, 2= cotton seed cake, 3= Agrimin i

At first three maiture cows are collecting who are not responding for breeding. They are medium health cow. I use three substances for excitement in consecutive 14 days.

From the Figure 1, it has been found that germ wheat responcees at a faster rate than the other two. Excitement order is germ wheat> cotton seed cake>Agrimin i. Agrimin I contains chel;ated materials, vitamins and probiotics. Benefits of Agrimin I tablets are -Helps in early onset of estrus on time immediate after calving, Improves involution of Uterus, Helps in shortening of the intercalving period, Improves Fertility & growth, Keeps animal healthy. But our result is not satisfactory for excitement of a maiture cow.Our result responcees the germ wheat at a faster rate. The result is very interesting for excitement of a cow for breeding.

Wheat is easily available and cheap than the other two excitement substances. For domestic cow it is very useful substance for easy excitement for breeding a cow. Maximum farmers are nurturing their cows to return something i.e, economical view point is too much essential for him. But when their cow is not ready for breed, they think that they sell their cow at a cheap rate, that is his loss of money and time both. It may be noted that germ wheat is a substance that a farmer who nurturing their domestic animal i.e, cow for better milk and obviously money, they can try this before selling their cow.

CONCLUSIONS

Among the three excitement substances germ wheat show quick result. Wheat is easily available in market. Germ wheat preparation is too much easy. Germ wheat is cheaper than the other two substances. As medicine cost is so high, germ wheat can play better excitation substance in our domestic purposes.

ACKNOWLEDGEMENTS

The author is thankful to the Department of Chemistry, A.K.P.C. Mahavidyalaya for all types of necessary

support. Dr. Kartick Roy, Venary Doctor, always helps me to fulfill this work.

REFERENCES

1. Bollongino, Ruth & al. *Molecular Biology and Evolution*. "Modern Taurine Cattle descended from small number of Near-Eastern founders". 7 Mar 2012. Accessed 2 Apr 2012. Op. cit. in Wilkins, Alasdair. "DNA reveals that cows were almost impossible to domesticate". 28 Mar 2012. Accessed 2 Apr 2012.
2. Cattle Today. "Breeds of Cattle at CATTLE TODAY". Cattle-today.com. Retrieved 15 October 2013.
3. Brown, David (23 April 2009). "Scientists Unravel Genome of the Cow". *The Washington Post*. Retrieved 23 April 2009.
4. Wilson, D. E.; Reeder, D. M., eds. (2005). "Bostaurus". *Mammal Species of the World* (3rd Ed.). Johns Hopkins University Press. ISBN 978-0-8018-8221-0. OCLC 62265494.
5. Integrated Taxonomic Information System. Retrieved 9 May 2015.
6. *Washington Post*, 11 August 2007
7. Groves, C. P., 1981. Systematic relationships in the Bovini (Artiodactyla, Bovidae). *Zeitschrift für Zoologische Systematik und Evolutionsforschung*, 4:264–278. Quoted in Grubb, P. (2005). "Genus Bison". In Wilson, D. E.; Reeder, D. M. *Mammal Species of the World* (3rd Ed.). Johns Hopkins University Press. pp. 637–722. ISBN 978-0-8018-8221-0. OCLC 62265494.
8. Takeda, Kumiko et al. (April 2004). "Mitochondrial DNA analysis of Nepalese domestic dwarf cattle Lulu". *Animal Science Journal* (Blackwell Publishing) 75 (2): 103–110. Doi:10.1111/j.1740-0929.2004.00163.x. Retrieved 7 November 2006.
9. Van Vuure, C.T. 2003. *De Oeros – Het spoor terug* (in Dutch), Cis van Vuure, Wageningen University and Research Centrum: quoted by The Extinction Website: *Bosprimigeniusprimigenius*.
10. Harper, Douglas (2001). "Cattle". *Online Etymological Dictionary*. Retrieved 13 June 2007.; "cattle, n." *OED Online*. Oxford University Press, September 2014. Web. 6 December 2014.
11. Harper, Douglas (2001). "Chattel". *Online Etymological Dictionary*. Retrieved 13 June 2007.; Harper, Douglas (2001). "Capital". *Online Etymological Dictionary*. Retrieved 13 June 2007.; "cattle, n." *OED Online*. Oxford University Press, September 2014. Web. 6 December 2014.
12. "Cow, n.1." *OED Online*. Oxford University Press, September 2014. Web. 6 December 2014.
13. Cattle Today. "Breeds of Cattle at CATTLE TODAY". Cattle-today.com. Retrieved 15 October 2013.
14. Brown, David (23 April 2009). "Scientists Unravel Genome of the Cow". *The Washington Post*. Retrieved 23 April 2009.