

Summaries of Other Projects

Seminar held to emphasize the 'One Health' approach in brucellosis control

Bovine brucellosis not only causes serious economic loss in dairying in India, it is also a serious public health issue, with the working capacity of the farmer being seriously affected as a result of its zoonotic potential. Realizing the importance of dealing with control of brucellosis holistically, the National Dairy Development Board (NDDB) initiated a pilot project in 2013–2014 in Kutch district, Gujarat. The pilot project currently covers 140 villages. The specific areas of focus in the pilot study are awareness creation; calf hood vaccination and identification of vaccinates through ear-tagging; disposal and disinfection methods; and identification of animals and humans suffering from the disease through a sequence of tests. Standardization of sampling using Flinders Technology Associate (FTA) cards has provided an easy system for transportation of suspected samples from animals to the laboratory without a cold chain using ordinary post, even from the remotest villages.

Under the aegis of the project, a seminar on 'Brucellosis and its zoonotic significance' was also organized. The main objective of the seminar was to create an awareness of the zoonotic significance of brucellosis, especially among doctors operating in the project area, and to promote a holistic approach to brucellosis control by bringing together all the stakeholders (doctors, veterinarians, paraveterinarians, policy makers etc.) and emphasizing the need to work together to control the problem of brucellosis, both in humans and animals.

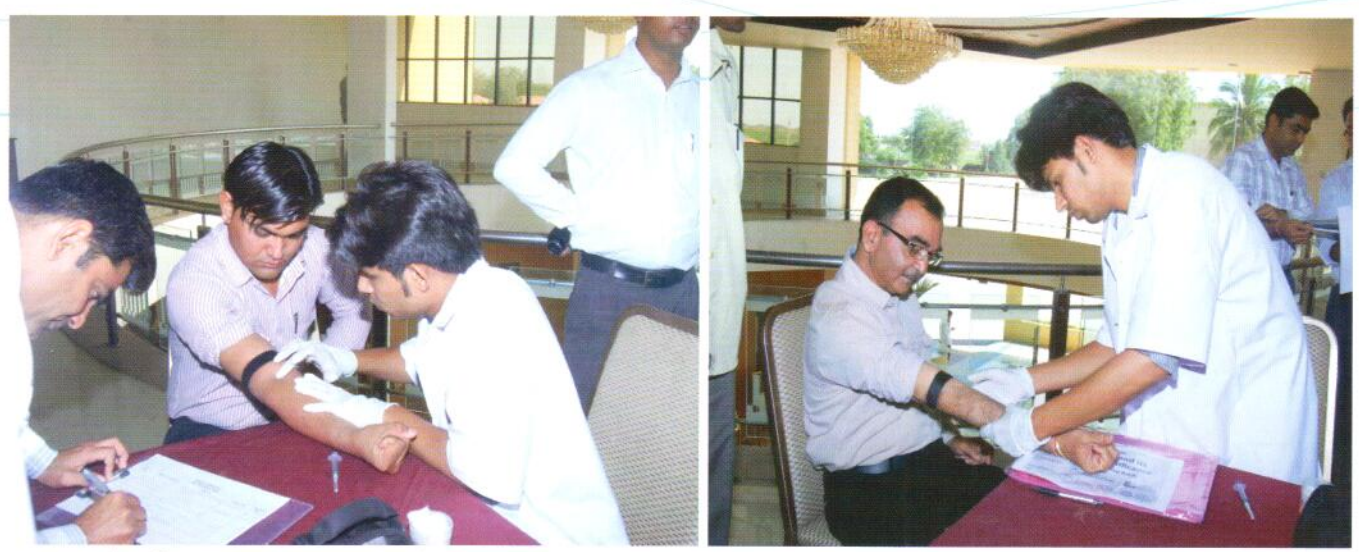
The Kutch district panchayat at president, president of the Indian Medical Association(Kutch), District Medical Officer, District Animal Husbandry Officer and officials from organizations such as the National Institute of Occupational Health (NIOH) and the Indian Council of Medical Research (ICMR) participated in the seminar along with 49 medical doctors and 51 veterinarians and paraveterinarians of the district.

Dr. B. G. Mantur, a pioneer on human brucellosis in India, was invited to deliver lectures, especially to inform the medical doctors on the zoonotic significance of brucellosis, its diagnostic challenges and specific treatment protocols. The seminar also created links between medical doctors, veterinarians and the producer companies implementing the control project so that the holistic 'One Health' approach being advocated by WHO, FAO and OIE could be put into practice in the pilot project. A sero-sampling camp was also held at the venue jointly by the Gujarat Animal Husbandry Department and NIOH. Around 45 participants, mainly veterinarians and livestock inspectors, provided their blood samples for testing.

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Inauguration of the seminar on 'Brucellosis and its zoonotic significance'



Sero-sampling from paraveterinarians and veterinarians by NIOH officials for brucellosis testing

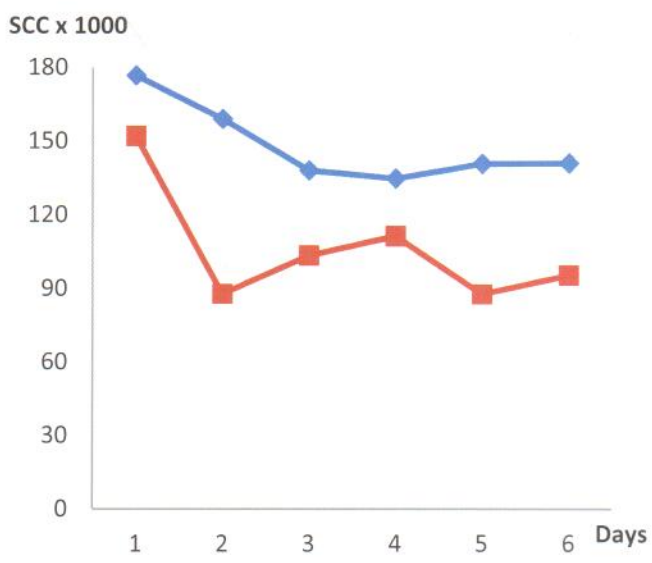


Figure 1 Somatic cell count between the 1st and 6th DHI test days after treatment with Boviseal® (blue). SCC for control animals is shown in red

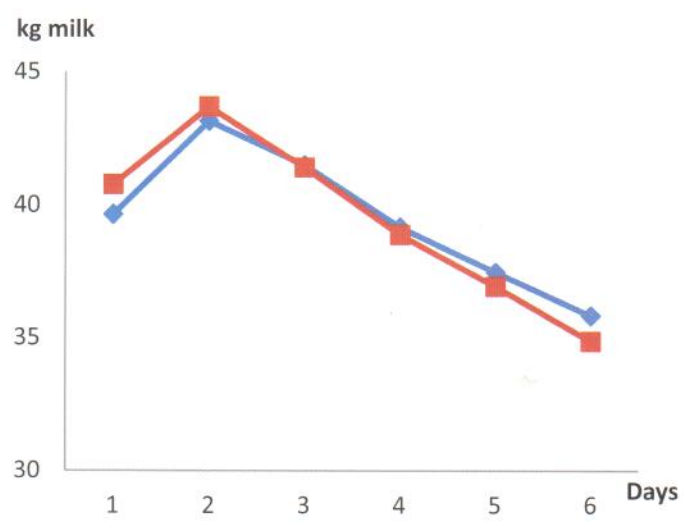


Figure 2 Yield between the 1st and 6th DHI test days after treatment with Boviseal® (blue). Yield for control animals is shown in red

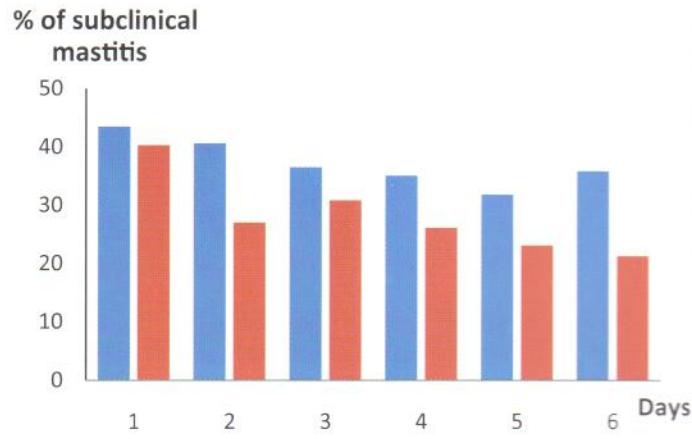


Figure 3 Proportion of cows with subclinical mastitis between the 1st and 6th DHI test days after treatment with Boviseal® (blue). Proportion for the control group is shown in red

Statistical interpretation
 Cows treated with Boviseal® had a significantly higher SCC at test days two and five after calving ($p=0.01$ and $p=0.01$, respectively). The yield did not differ between the groups on any of the test days.
 The risk of subclinical mastitis on DHI test days 1–6 was the same in both groups, whereas the risk of clinical mastitis was three times higher for cows treated with Boviseal® ($p=0.02$).