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**Application of Takeyasu Bacteria in Livestock Feed**

1. Dairy Cows: Hyogo Pref. Awaji Agri. Technical Center and Kobe University
  - 1) Improvement of fiber digestibility and ruminal conditions
  - 2) Enhancement of nitrogen intake by ruminal bacteria
  - 3) Increase of BUN
  - 4) Observation of an increase of protein and solids-not-fat in milk
  - 5) Details are shown in Research Report
  
2. Dairy Cows: Farm at Sumoto-city (Visited with Kobe University staff, 4 times in 2004)
  - 1) Reduction of incidence of the diseases at the farm
  - 2) Good appetite in summer season (good appetite in general)
  - 3) Quick recovery of mastitis symptoms
  - 4) Smooth calves delivery and reduction of reproductive disorders
  - 5) Reduction of farm odor
  
3. Dairy Cows: Farms at Shimane Pref. (Visited with Kobe University staff and a veterinarian of Ono NOSAI, 3 times in 2004)
  - 1) Good body condition, less infection of pneumonia
  - 2) Reduction of mastitis and light mastitis problem (30% incidence to less than 5%, E. coli problem in the past)
  - 3) Reduction of reproduction disorders and number of culled cows
  - 4) Increase milk fat (milk fat reduction by stopping the bacteria feeding)
  - 5) Reduction of farm odor and number of flies in summer
  - 6) Reduction of manure odor in winter and better fermentation
  
4. Japanese Black Cattle (WAGYU): Farm at Shimane Agri-Coop
  - 1) Reduction of white score in calves (bacteria feeding in cows in whole period)
  - 2) Reduction of pneumonia and diarrhea in young calves after the transfer (for 3 months)
  - 3) Reduction of problems at the transfer for young fattening cattle (deficiency of vitamins) (for 3 to 4 months)
  - 4) Reduction of odor of manure and cattle house

5. Pigs

- 1) Increase of viability (feeding on boars)
- 2) Reduction of diarrhea in suckling pigs (feeding in sows)
- 3) Reduction of antibiotic use
- 4) Reduction of odor of manure and houses and number of flies

6. Poultry

- 1) Improvement of egg quality, higher Haugh Unit and maintain freshness
- 2) No change of laying
- 3) (Did not improve broiler FCR)
- 4) Reduction of manure and house
- 5) Better quality of compost

7. Horse

- 1) Reduction of incidence of constipation colic
- 2) Few incidence of colicky pain by volvulus
- 3) Reduction of fecal odor