“How to better involve end-users throughout the research process to foster innovation-driven research for a sustainable Mediterranean agriculture at the farm and local scales.”

30 May - 3 June 2016, Institut Agronomique Méditerranéen de Montpellier (IAMM), France

Improving beef meat production in Algeria by biotechnology of artificial insemination

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CONTEXT & CHALLENGES

• Belgian White Blue (BWB) breed is used widely in Europe for crossing with dairy cattle to improve carcass value in slaughter progeny.

• Algerian Ministry of Agriculture subsidized often programs to improve milk production and never meat.
OBJECTIVE

- Test the crossing of BWB with dairy and mixed cattle breed producing low milk or/and those are in the end of career to enhance their efficiency in livestock.

Research / Development Project is tested for the first one in Algeria
METHODOLOGY

- 250 straws of frozen semen of one bull BWB, were provided from NAI center.
- AI is carried in cows of serious farmers who agreed the monitoring of calfs’ growth for 1 year.
- Type of calving was measured at birth using 5 scores (1: easy; 2: easy help; 3: difficult; 4: caesarean; 5: surgical removal of calf).
- Calves were weighed at birth, 3 and 12 months.

INVolVEMENT OF Stakeholders

- breeders & fatteners.
- Beef producer.
EXPECTED RESULTS

Until now 111 multiparous cows were inseminated and 82 calves were born. Preliminary results: 1st 95 inseminated cows and 52 born calves

• **Inseminated cows:** 67% Montbeliarde, 23% Fleckvieh and 9% Holstein.
• **Pregnant frequency after 1st AI:** 78%
• **Pregnancy rate:** 95%
• **Calving type:** 92% calving almost easy, 8% difficult calving.
  No cesarean was performed
• **Gestation length:** 279 ± 5 days, short relative to other breeds
• **Calf weight cross calves**
  ➢ 12 months: 524 Kg (Montbeliarde) vs 468 Kg (Fleckvieh).

+ 56 Kg

Satisfactory results!
4 twin births: calving with easy help.
IMPACT ECONOMIC

✓ Contribute to food security.
✓ Produce a meat with low cholesterol, more favorable to health.
✓ Increase farmer's income and creation of jobs in rural areas.
Farmer has 16 cross calves
The heaviest bull: 12 months: 570Kg
24 months: 1035 Kg
Calf: 1 month

Same calf: 1 year
PROPOSED PARTNERSHIP

- Farmers did not follow a special feeder program!

- Collaboration with an **European partners** as: France, Italy or Spain to develop an adequate fattening program to reach the best weight at slaughter.
Thank you for your attention!