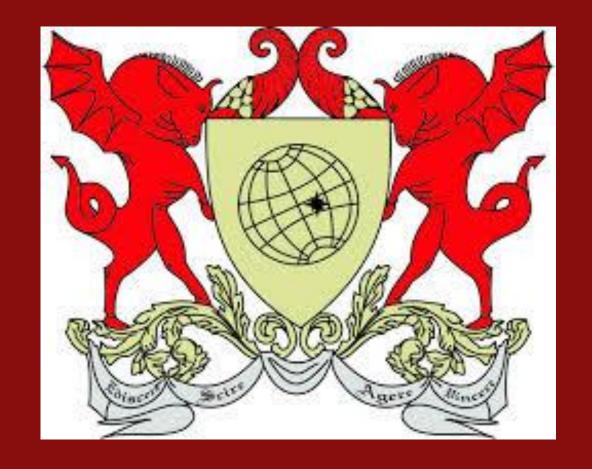
1<sup>st</sup> INTERNATIONAL MEETING ON



ector of levelonme

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# Characterization of Marajó's cheese and profile of its producers



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with whole milk

Pressing



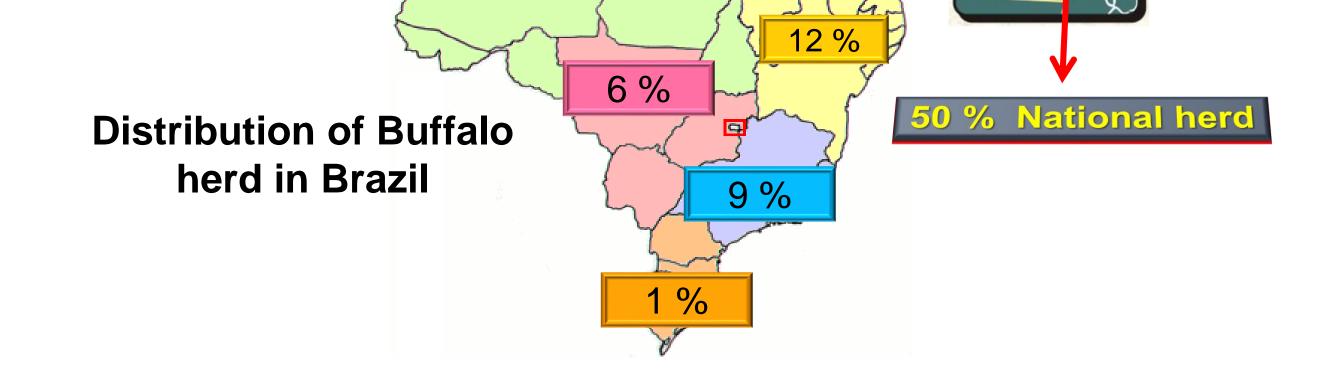






1) Characterize by physicochemical analysis the cream-type and the





**Table 1**: Buffalo and cow milk composition

Parameters	Mi	lk			
	Buffalo	Cow			
H <sub>2</sub> 0	83.00	88.00			
Fat (%)	8.16	3.68			
Protein (%)	4.50	3.70			
Ash (%)	0.70	0.70			
Total solids (%)	17.00	12.00			
Vitamin A (U.I.)	204.27	185.49			
Source: Verruma & Salgado (1993)					

Water buffalo farming is essential for Amazonia, particularly in flooded areas (Marajó Island) where no other domestic species is so well adapted. Marajó's handmade cheese is one of the most produced and consumed derivatives of buffalo milk in the region.

butter-type Marajó's cheeses : rainy versus dry season

**Cutting/Milling** 

with skim milk

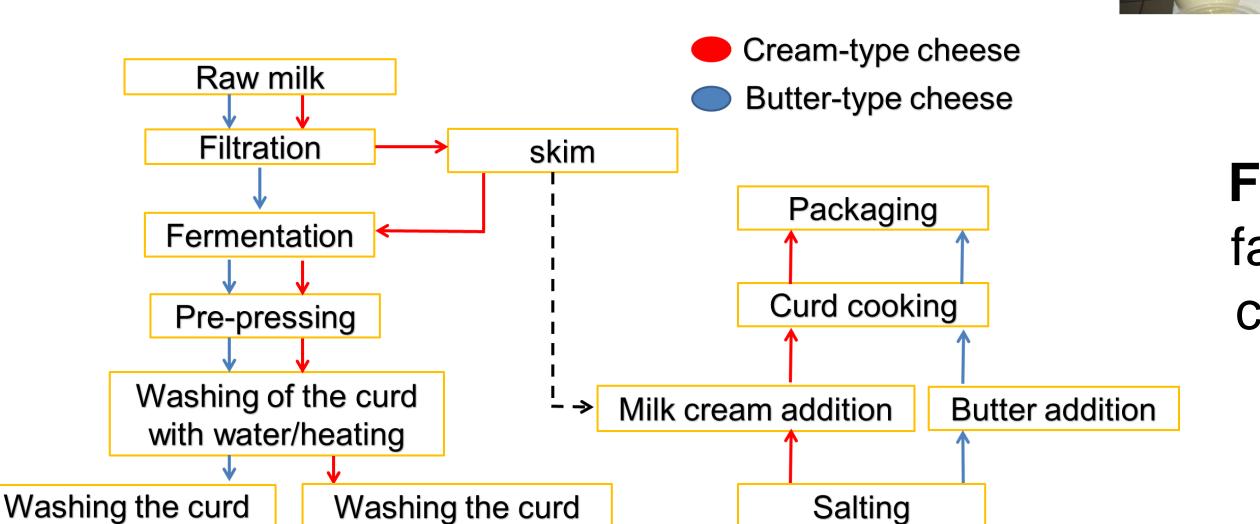




Figure 1: Flowchart of fabrication of artisanal cheeses Marajó type" butter" and type" cream".

2) Outline the profile of handmade Marajó's cheese producers interview



### **RESULTS AND DISCUSSION**

**Table 2**: Physicochemical characteristic of cream-type and butter-type Marajós's cheeses in rainy and dry seasons

Results	Cream-type Marajó's cheese		Butter-type Marajó's cheese	
	Rainy	Dry	Rainy	Dry
Acidity (% lactic acid)	0.35 <sup>a</sup>	0.32 a	0.42 <sup>c</sup>	0.26 <sup>d</sup>
рН	4.89 b	5.58 <sup>a</sup>	5.27 <sup>d</sup>	5.59 <sup>c</sup>
Moisture (%)	<b>43</b> a	41 <sup>a</sup>	50 <sup>c</sup>	50 <sup>c</sup>
Fat (%)	<b>38</b> a	<b>41</b> <sup>a</sup>	22 <sup>c</sup>	20 c
Total Protein (%)	19 <sup>a</sup>	19 <sup>a</sup>	25 <sup>c</sup>	24 <sup>c</sup>
Ash (%)	1.6 <sup>a</sup>	1.7 <sup>a</sup>	2.5 <sup>c</sup>	2.4 <sup>c</sup>
Total solids (%)	56 <sup>a</sup>	<b>59</b> a	49 <sup>c</sup>	50 <sup>c</sup>
Fat in total solids (%)	66 <sup>a</sup>	57 <sup>b</sup>	45 <sup>c</sup>	41 <sup>d</sup>
Salt (NaCl) (%)	0.45 <sup>b</sup>	<b>0.66</b> a	1.06 <sup>c</sup>	1.08 <sup>c</sup>





## Handmade Marajó's cheese producers profile:

#### Labor: Family (70 %)

Source of income: cheese (30 %)

**Experience: more than 10 years** 

No training course (60 %)

**Complete basic studies (40 %)** 

Means followed by the same lower case on the lines do not differ significantly by the Tukey test (p < 0.05). S.D. = standard deviation.

Need greater control of production  $\rightarrow$  standardization and maintenance of the identity of the product.

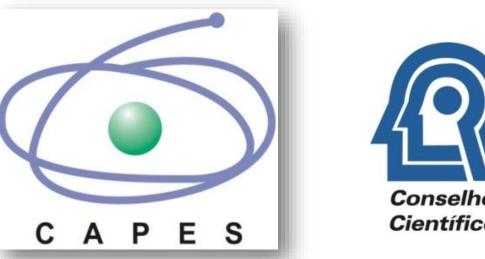
## CONCLUSION

- Family craft production; small scale production
- Use of rudimentary technology
- Season reflected in some physicochemical characteristics.

# REFERENCES

Verruma, M.R.; Salgado, J.M. (1993). Avalição nutricional do leite de búfala em comparação ao leite de vaca. Scientia Agricola, 50 (3), 444-50.

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