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Sugarcane straw is increasingly valued for its agronomic benefits and importance in livestock farming, especially as chemical inputs decline. This study aims to analyze the diverse straw management practices among growers on Réunion Island, considering various challenges. The focus is on understanding how these practices impact straw production and export strategies to optimize resource use amid evolving agricultural constraints.

100% of the straw left in the field by planters

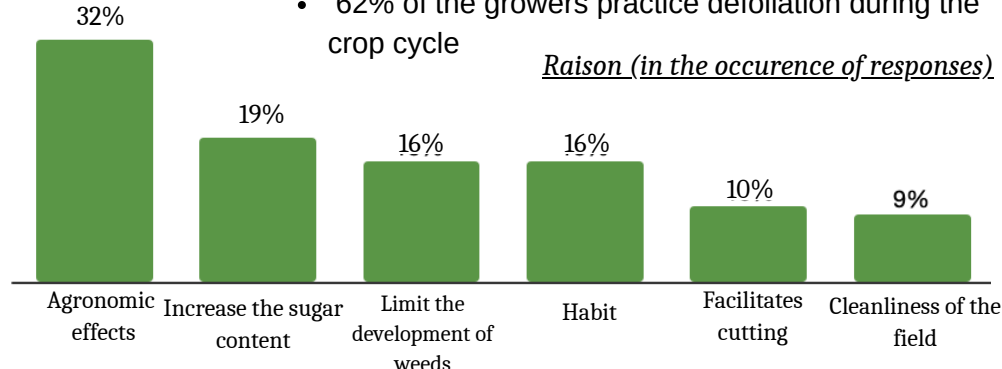


- Delays weed emergence by 1 or 2 months
- Adds organic matter ("manure")
- Retains soil moisture and coolness during drought
- Reduces erosion

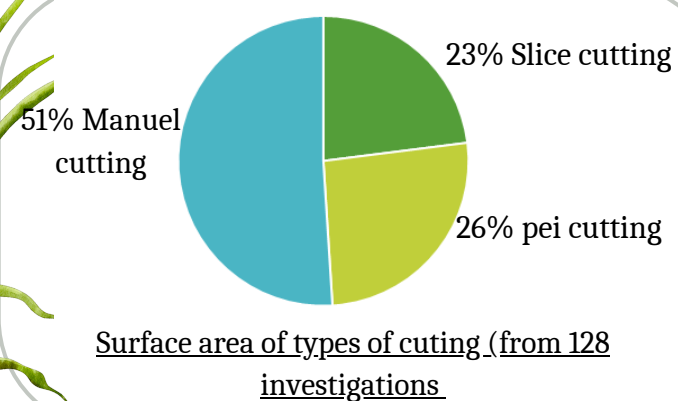


- Attracts insects and pests (harmful)
- Limits the effectiveness of pre-emergent herbicides and fertilizers (acts as a barrier)
- Be cautious of stump rot (in humid climates)
- May hinder the emergence of young shoots

Cane defoliation

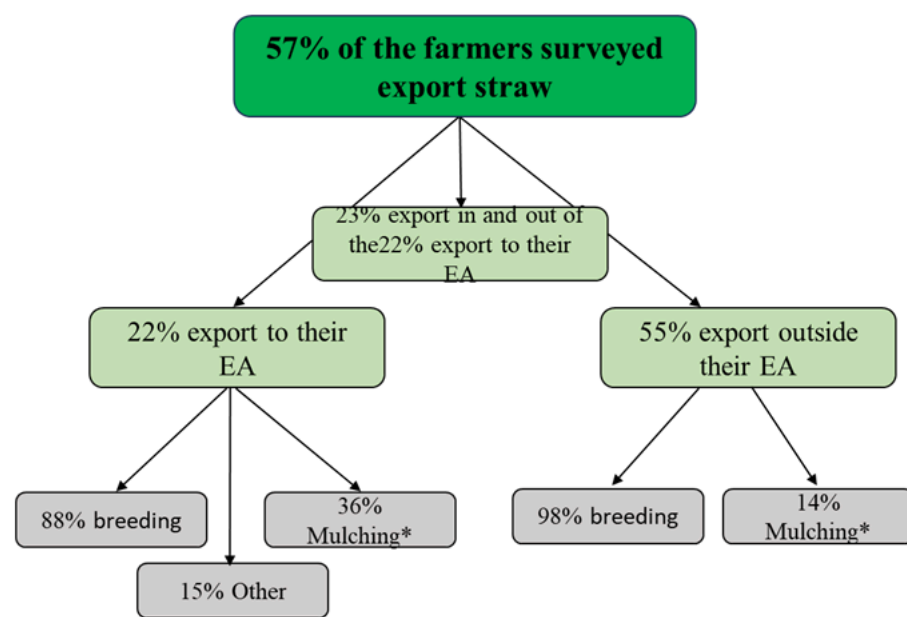


VaVariety easy to mulch: R579 et R583



Straw export: 74 farmers concerned (i.e. 57%)

In Occurrence of Answers



*Mulching: market gardening, arboriculture and vanilla plantation(1)

1 Small sloped areas mainly in the Highlands, non-irrigated agricultural lands, diversified with or without livestock. Manual harvesting, exporting straw during replanting and regrowth, with some practicing cane defoliation.

2 Low-altitude farms, generally mechanized, non-irrigated, and located away from livestock operations. Section cutting, exporting straw only during replanting. Pei cutting without combing, not exporting straw, and practicing defoliation on certain plots

3 Diversity of straw and sugarcane management methods. Farms of various sizes and diversified. Manual harvesting, without straw export, with possible defoliation. Pei harvester, exporting straw only during regrowth. Non-irrigated agricultural lands

4 Volcanic soil, steep and rugged plots, limited mechanization, non-irrigated, and diverse management methods. Small to medium-sized farms, diversified (vegetable farming, etc.). Manual harvesting, exporting bulk straw during replanting, without defoliation. Pei harvester with a comb, not exporting straw and not practicing defoliation.

5 Gentle slopes, with medium-sized, diversified, mechanized, and irrigated farms. Section cutting, with or without straw export during each harvest

6 Large farms, mechanized, diversified, and with significant livestock operations. Section cutting and/or Pei harvesting, exporting straw in the form of round bales during replanting or in bulk during each harvest season, without practicing defoliation.

*Small farm: less than 9.5 ha; Medium: between 9.5 and 17 ha; Large: more than 17 ha

Straw has become a highly sought-after resource due to its agronomic benefits and its applications in livestock farming. It plays a significant role in both formal and informal exchanges between growers and livestock farmers. As the availability of approved chemicals decreases and the demands of livestock farming increase, straw will become even more valuable. To optimize the flow of this resource, prioritizing the development of a structured straw supply chain is essential. Various straw management practices exist, each offering its own set of advantages and disadvantages.