

Post-harvest Loss Management Initiative in Senegal : Using Bio-pesticides for Sustainability and Food Security

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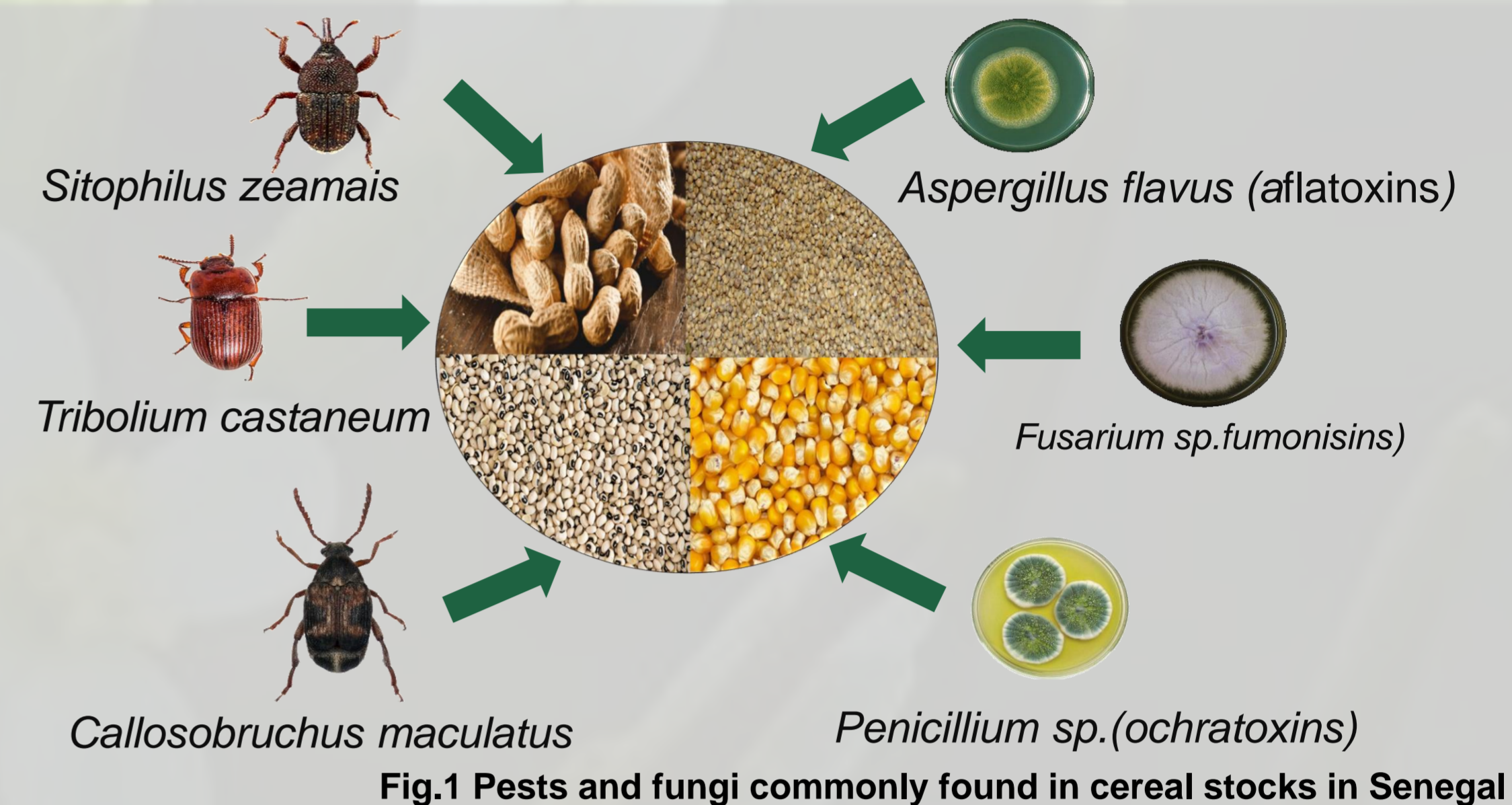
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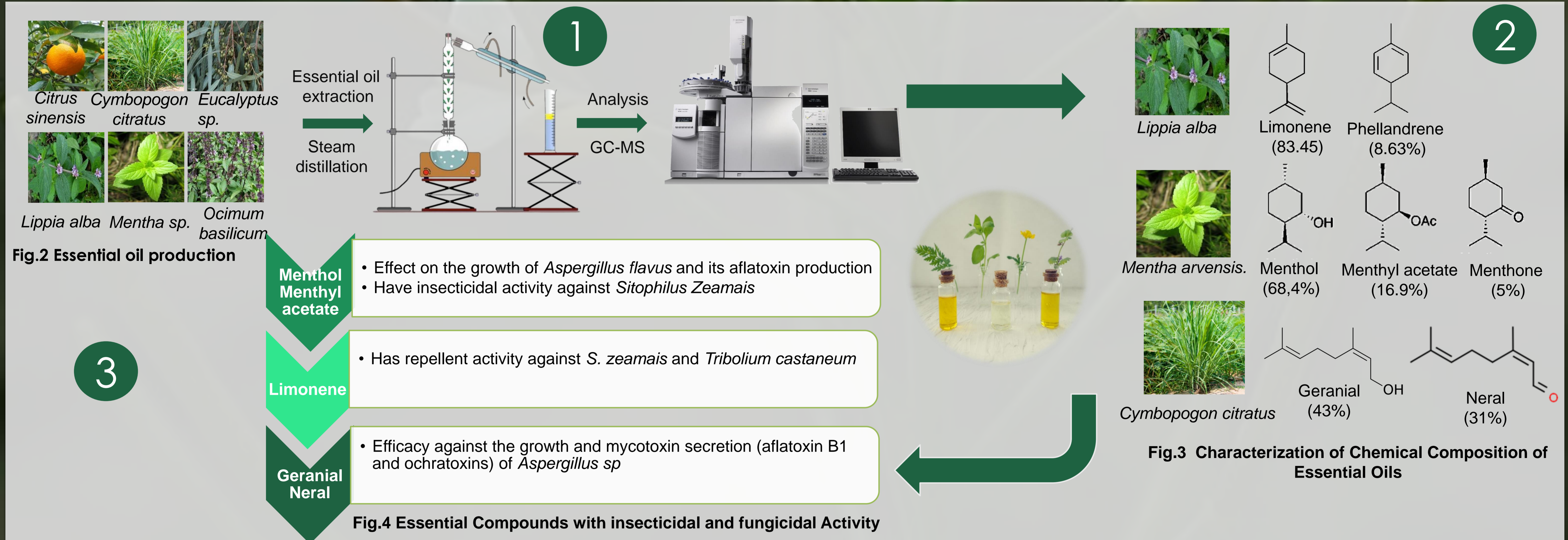


Context and objectives

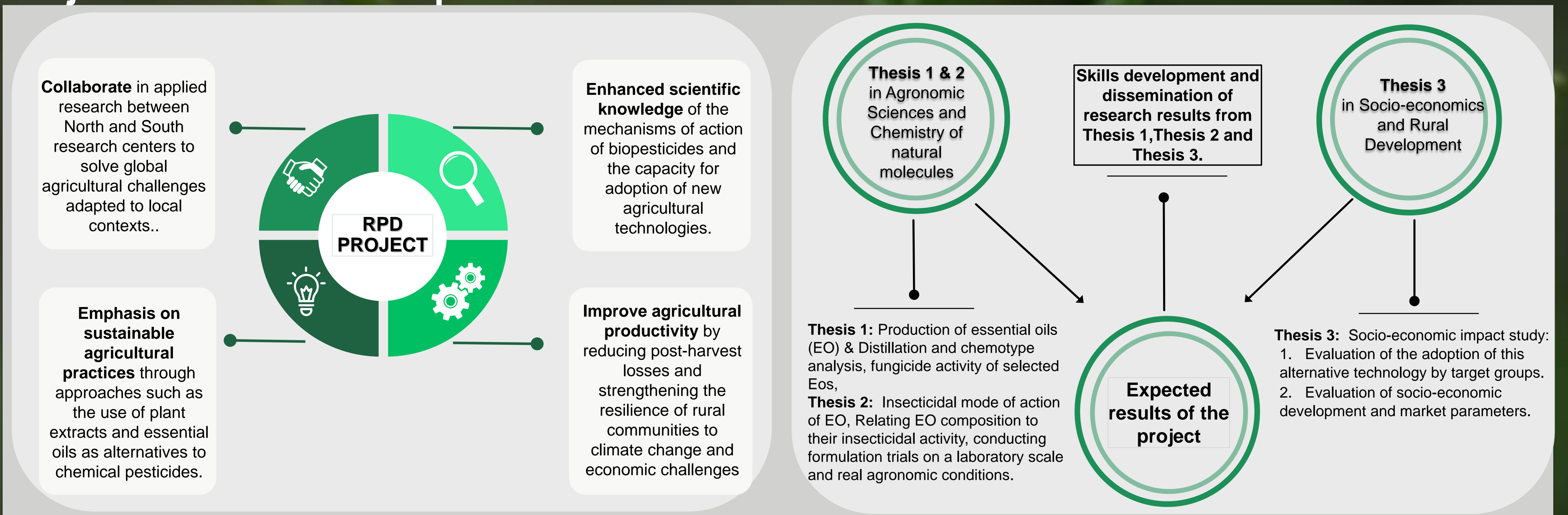
Post-harvest losses pose a significant challenge to the sustainability of food systems. Globally, the FAO estimates that 14% of food is lost between harvest and retail. In Senegal, losses, estimated between 13 and 70% of production, primarily affect cereal and legume sectors, remaining high due to infestation by insects and fungi that produce mycotoxins. The excessive use of chemical pesticides to combat agricultural pests compromises both the environment and human health. Therefore, the importance of transitioning to sustainable agricultural practices, such as the use of bioactive molecules, especially essential oils with insecticidal and/or antifungal properties, highlights the need to address this issue. In this context, this project aims to explore the potential applications of essential oils in managing post-harvest losses during storage, thereby promoting a more competitive and environmentally friendly agriculture.



Key findings from previous researches



Project overview and expected results



Conclusion

The development of alternative pest control technologies, such as the use of EO, is crucial to ensuring food security and the sustainability of agricultural production in Senegal. Therefore, this collaborative research approach can offer effective, environmentally friendly solutions for reducing post-harvest losses while safeguarding human health and promoting the economic development of rural communities. .

References

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