



EFFECT OF PACKAGING MATERIALS ON SHELF LIFE OF FRESH CORIANDER LEAVES (*Coriandrum sativum* L.) STORED UNDER DIFFERENT CONDITIONS

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Introduction

- Coriander (*Coriandrum sativum* L.) is a seed as well as herbal spice which belongs to Apiaceae
- Coriander leaves are rich sources of vitamins, minerals and antioxidants
- It is highly perishable herbal spice due to its delicate leaves, improper handling during marketing, excessive moisture loss, high respiration rates, microbial infection (Sharangi *et al.*, 2015)

Objective

- To evaluate the effect of different storage conditions and packaging material on the shelf life of coriander leaves

Materials and methods

- Design : CRD
- Packaging materials: Tissue paper wrap, Brown paper cover, LDPE 200, 350, 440
- Storage conditions: Ambient (27°C), Refrigeration (4°C) and cold storage (13°C)

Results

Table 1. Effect of packaging materials on physiological loss in weight (%) of coriander leaves at refrigerated condition

Packaging material	Days after packing				
	2	4	6	8	10
LDPE 200	3.98 ^c	7.59 ^b	10.75 ^c	16.09 ^c	19.44 ^c
LDPE 350	2.18 ^d	6.22 ^b	9.31 ^c	11.58 ^d	14.55 ^d
LDPE 440	4.19 ^c	6.33 ^b	10.04 ^b	11.64 ^d	14.61 ^c
Tissue paper wrap	26.85 ^a	40.55 ^a	60.96 ^a	67.78 ^a	74.41 ^a
Brown paper cover	13.77 ^b	37.39 ^a	50.30 ^a	61.64 ^b	67.75 ^b



Refrigerator (10 days)

Conclusion

- Packaging materials and storage conditions have significant influence on shelf life of fresh coriander leaves
- Maximum shelf life is under refrigerated condition (10 days) and minimum is under ambient condition (4 days)
- Suitable packaging material of coriander leaves is LDPE 350 followed by LDPE 440



Cold storage (8 days)



Ambient (4 days)

References

Sharangi, A. B., Guha, S., and Chakrabarty, I. 2015. Effect of packaging material on storage life of fresh coriander (*Coriandrum sativum* L.) leaves. *Nat. Sci.* 13(6):100-108.