



Iran

Problem No.16 Flying seed

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IYNT 2022

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This problem is about seed that have an interesting way of coming down when falling.
We need to investigate different motions of different types of seed.



Statement

Different types

Different ways of falling

Changed the height of the seed

Analysis of the terminal velocity

The angle of attack

Investigation of the drag and lift coefficient

The main principle

Reporter analysis

Theory & Experiments

Advantages .

- ✓ Experiments and theory comparison
- ✓ Different affecting parameters
- ✓ Considering the terminal velocity in appropriate condition

disadvantages .

- × Lack of affecting parameters
- × Didn't have comparison between experiments and theories
- × Didn't check the center of mass for the rotational movement
- × Would be better to test the experiments with natural seeds.

Missed points

They could've done the experiment in different heights from the ground to investigate the terminal velocity correctly

Better to find the center of mass affection on the rotational movement.

Simulated the experiments

Points to discuss

- 1-The speed and terminal velocity of this movement deepens on what?
- 2-What are the different ways that a seed Can fall? What does it depend on?
- 3-What did you make the seeds out of?
- 4-Why didn't you use natural seeds?
- 5-Does the seed being thin or thick affect the falling?

Points to discuss

- 1- is it possible for a seed to change the way that it's going down mid-fall?
- 2-



Thank You For Your Attention



Clarify q

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Points to discuss

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