



## Colorado Science and Engineering Fair

## 2024 Individual Project Abstract Form

**Please print 2 copies of the completed form. Sign both copies, keep 1 for your notebook and submit 1 copy to your Regional Fair Director with your other paperwork.**

Title of Project: Monitoring Apis Mellifera Linnaeus for Winter Survival

Finalist's Name: Priya Mayjoy

School and City: Lamar Middle School

Sponsor's Name: Robin Staker

Category: Animal Sciences (ANIM)

Division: Junior (6th - 8th grades)

Abstract (250 words or less):

This project is about bee life and how winter affects them. My project started as an observation of bees in the field through the summer months during harvest and focused on monitoring bees' temperature through the winter months. My hypothesis supports beekeepers. If I successfully monitor the heat in hives during the winter, then I can predict hive survival through the season. In order to monitor the bees, I placed a thermometer wire into the beehive and placed the other end of the wire onto the outside of the box. Then every week, I checked and recorded the temperatures. I also recorded data from a camera called the Flir. When I performed these tests after eight weeks, I found that most of the year old hives were not as successful as the older hives. My hypothesis was accurate in some ways. It was helpful to see the temperature of the beehive, but I think that there are many other ways to monitor bees. I would love to explore these options for future testing. These findings from my experiment show how it is possible to monitor bees without disrupting them during the winter months.

*I hereby certify that the above statements are correct and the information provided in the Abstract is the result of one year's research. I also attest that the above properly reflects my own work.*

Finalist's Signature: *Priya Mayjoy*

Date: *3/4/24*

In addition, all students must complete the ISEF Student Checklist (1A), Research Plan, Approval Form (1B), and Checklist for Adult Sponsor (1), and any other ISEF forms required for this type of project. See the International Rules and Guidelines for form requirements. Return COPIES of all of these forms to your Regional Fair Director with you Finalist Verification/Permission Form. A signed copy of this form must be included in your notebook.