# Agriscience Fair Project Ideas For High School

Here are the most useful Agriscience Fair Project Ideas for students:

#### **Plant Science Projects**

- 1. Study how music affects plant growth patterns
- 2. Compare organic vs. chemical fertilizers on tomato yield
- 3. Test different colored lights' impact on herb growth
- 4. Measure companion planting benefits between corn and beans
- 5. Study hydroponics systems using local water sources
- 6. Explore seed germination rates in various soil types
- 7. Test natural pest controls on garden vegetables
- 8. Measure drought resistance in native grass species
- 9. Study plant growth with recycled water systems
- 10. Compare vertical farming methods for leafy greens
- 11. Test coffee grounds as natural plant fertilizer
- 12. Study crop rotation effects on soil health
- 13. Measure plant responses to different pruning methods
- 14. Compare urban rooftop growing system effectiveness
- 15. Test natural weed control methods' effectiveness

#### Animal Science Projects

- 16. Study chicken egg production with different feeds
- 17. Compare bee behavior with various flower types
- 18. Measure dairy cow milk yield seasonal changes
- 19. Test natural supplements' effect on fish growth
- 20. Study sheep wool quality under different conditions
- 21. Compare rabbit breeding in various environments
- 22. Measure goat milk production with feed changes
- 23. Study horse behavior with different exercise patterns
- 24. Test natural parasite control in cattle
- 25. Compare pig growth rates using local feeds
- 26. Study duck behavior in different water conditions
- 27. Test turkey growth with varying light exposure
- 28. Measure quail egg production in different homes
- 29. Study fish behavior in aquaponics systems
- 30. Compare different bedding effects on animal health

#### Soil and Water Projects

- 31. Test rain garden filtration effectiveness
- 32. Compare soil erosion prevention techniques locally
- 33. Study water retention in different mulches
- 34. Measure groundwater quality near farms
- 35. Test natural water filtration systems

- 36. Compare composting methods for soil improvement
- 37. Study soil microbe activity in gardens
- 38. Measure nitrogen-fixing with cover crops
- 39. Test soil pH changes with amendments
- 40. Compare water conservation irrigation methods
- 41. Study soil compaction effects on roots
- 42. Test natural soil remediation techniques
- 43. Measure rainwater harvesting system efficiency
- 44. Study stream health near farming areas
- 45. Compare soil types for crop growth

#### Food Science Projects

- 46. Test natural food preservation methods
- 47. Compare home fermentation technique results
- 48. Study honey crystallization under conditions
- 49. Measure cheese aging process effects
- 50. Test herb drying preservation methods
- 51. Compare different yogurt culture effectiveness
- 52. Study fruit ripening with ethylene gas
- 53. Measure bread rising with natural yeast
- 54. Test food storage method effectiveness
- 55. Compare pickling methods for vegetables
- 56. Study apple varieties for sauce-making
- 57. Test maple sap collection techniques
- 58. Measure kombucha brewing variables' effects
- 59. Study meat curing with natural ingredients
- 60. Compare fruit dehydration methods results

#### **Environmental Science Projects**

- 61. Study butterfly garden plant effectiveness
- 62. Compare pollinator attraction to native flowers
- 63. Test windbreak designs for farm protection
- 64. Measure solar energy use in greenhouses.
- 65. Study beneficial insect habitat creation
- 66. Compare natural pest barrier effectiveness
- 67. Test green roof plant survival rates
- 68. Measure wildlife corridor use on farms
- 69. Study bird populations in different fields
- 70. Compare natural cooling system methods
- 71. Test farm waste recycling techniques
- 72. Measure biodiversity in field edges
- 73. Study wetland plant filtering ability
- 74. Compare different habitat restoration methods
- 75. Test natural mosquito control effectiveness

### Agricultural Technology Projects

- 76. Study smartphone plant disease detection
- 77. Compare drone crop monitoring methods
- 78. Test automated watering system designs
- 79. Measure solar-powered farm tool effectiveness
- 80. Study weather station accuracy comparison
- 81. Compare greenhouse automation systems
- 82. Test soil moisture sensor types
- 83. Measure smart composting system effectiveness
- 84. Study livestock tracking device accuracy
- 85. Compare farm mapping tool results
- 86. Test temperature monitoring system designs
- 87. Measure wind energy pumping efficiency
- 88. Study automated feeding system effectiveness
- 89. Compare farm data collection methods
- 90. Test farm security system designs

#### Sustainable Agriculture Projects

- 91. Study urban farming space efficiency
- 92. Compare natural pest management systems
- 93. Test permaculture garden design effectiveness
- 94. Measure food forest production rates
- 95. Study greywater irrigation safety
- 96. Compare no-till farming method results
- 97. Test natural fertilizer combinations
- 98. Measure crop rotation benefits
- 99. Study companion planting effectiveness
- 100. Compare sustainable livestock grazing patterns
- 101. Test native plant adaptation methods
- 102. Measure biodiversity in farming systems
- 103. Study natural soil building techniques
- 104. Compare water conservation farming methods
- 105. Test organic pest control effectiveness

#### Agricultural Economics Projects

- 106. Study farmer's market pricing strategies
- 107. Compare direct marketing method results
- 108. Test value-added product effectiveness
- 109. Measure community-supported agriculture benefits
- 110. Study farm stand location effects
- 111. Compare organic certification cost benefits
- 112. Test farm tourism activity success
- 113. Measure local food system impacts
- 114. Study farm cooperative effectiveness
- 115. Compare farm subscription service results

- 116. Test agricultural product packaging impact
- 117. Measure farm labor efficiency methods
- 118. Study farm diversification benefits
- 119. Compare farm insurance option effects
- 120. Test farm business model success

#### **Biotechnology Projects**

- 121. Study plant tissue culture methods
- 122. Compare natural selection breeding results
- 123. Test beneficial microorganism effectiveness
- 124. Measure probiotic production methods
- 125. Study mushroom cultivation techniques
- 126. Compare seed-saving method results
- 127. Test plant propagation effectiveness
- 128. Measure bacterial culture growth
- 129. Study enzyme production methods
- 130. Compare natural genetic selection results
- 131. Test biological pest control effectiveness
- 132. Measure microbial soil enhancement
- 133. Study natural fermentation processes
- 134. Compare plant grafting technique results
- 135. Test beneficial fungi growing methods
- 136. Agricultural Engineering Projects
- 137. Study irrigation system efficiency
- 138. Compare greenhouse design effectiveness
- 139. Test farm tool improvement methods
- 140. Measure animal housing design benefits
- 141. Study farm equipment modification results
- 142. Compare storage facility designs
- 143. Test farm vehicle efficiency methods
- 144. Measure farm building ventilation effectiveness
- 145. Study farm safety system designs
- 146. Compare farm waste management systems
- 147. Test farm energy efficiency methods
- 148. Measure farm equipment maintenance results
- 149. Study farm structure improvement techniques
- 150. Compare farm transportation system effectiveness
- 151. Test farm processing equipment designs

### Agriscience Project Ideas with Animals

- 1. Study how bedding affects chicken egg quality over time
- 2. Compare growth rates of rabbits with different feed mixes
- 3. Research how barn lighting impacts dairy cow milk
- 4. Test if classical music lowers stress in horses
- 5. Measure the effectiveness of fly repellents on cattle

- 6. Study feed protein effects on beef weight gain in winter
- 7. Compare honey production with hive orientations
- 8. Examine browse options' impact on goat milk
- 9. Test if automatic waterers improve pig growth
- 10. Research stocking densities' effect on fish growth

## Agriscience Project Ideas with Plants

- 11. Compare heirloom and hybrid tomato seed germination rates
- 12. Study LED light colors on basil growth
- 13. Test marigolds' impact on vegetable pest control
- 14. Measure mulch types' effect on soil moisture
- 15. Research pruning methods on grape yield
- 16. Compare hydroponic lettuce growth with nutrients
- 17. Study fungi additions' effect on corn root yield
- 18. Test vermicompost on strawberry growth
- 19. Measure planting depth impact on potato quality
- 20. Research pest deterrents on cabbage health

### FFA Agriscience Fair Project Ideas

- 21. Compare egg shelf life with different preservation methods
- 22. Study weed control in soybean fields
- 23. Test soil compaction with cover crops
- 24. Measure irrigation systems for water conservation
- 25. Research feed supplements on cattle muscle growth
- 26. Compare natural fertilizers' effect on corn yield
- 27. Study grain storage and feed quality
- 28. Test soil amendments for tomato rot
- 29. Measure grazing rotations' impact on pasture recovery
- 30. Research natural fire ant control methods

### Agriscience Project Ideas with Dogs

- 31. Study Reward Types' Impact on Puppy Learning Speed
- 32. Compare natural flea control methods
- 33. Test if exercise affects working dog stamina
- 34. Measure protein sources' effect on coat health
- 35. Research mental enrichment effects on senior dogs
- 36. Compare kennel bedding for outdoor dogs
- 37. Study feeding schedules' effect on performance
- 38. Test aromatherapy on shelter dog anxiety
- 39. Measure supplements' effect on aging dog joints
- 40. Research socialization methods on puppy development