



## Radio-Frequency Identification in Agriculture

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### Introduction

RFID refers to Radio Frequency Identification Technology is a popular technology used in Smart Farming. This technology mostly uses the digital data. This technology also uses the barcode scanner and reader for smooth processing of data in the database. RFID can also used as a tag in many agricultural products. This tags helps to determine the health condition of the products, this is highly beneficial for food safety, security and traceability.

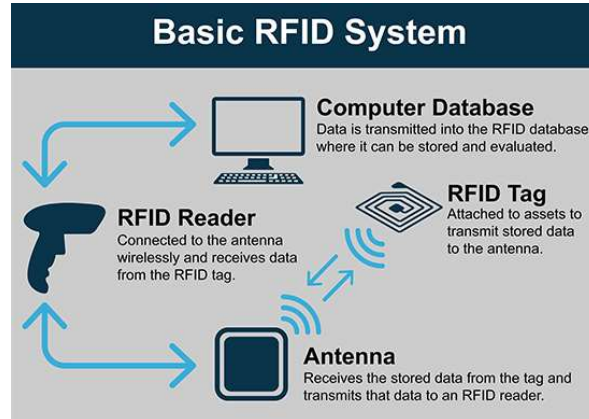


### Components of RFID

- RFID Reader
- Computer Database
- RFID Tag
- Antenna



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### Application of RFID in Agriculture

RFID is helping the agricultural scientist and farmers in a numerous ways. This includes

- Tracking and Monitoring of Livestock
- Enhanced Traceability and Quality control
- Detection of plant diseases
- Food safety and security
- Real time data collection
- Optimized irrigation





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### Limitations of RFID tag

RFID is mostly used in high tech farming. But due to high initial cost, most of the farmers unable to afford it. Cost of RFID tags is also higher as compare to other products in the smart farming. Data encryption process is also quite expensive.

