

```
In [46]: test_dir=r'C:\Users\praveen\Desktop\FILES\data_for_ibm\Fertilizers_Recommendation_ System_For_Disease_ Prediction\Dataset Plant Disease\fruit-dataset\
```

```
In [47]: import tensorflow as tf
from tensorflow import keras
from tensorflow.keras.preprocessing.image import ImageDataGenerator
```

```
In [48]: model = tf.keras.models.load_model(r'C:\Users\praveen\Desktop\FILES\data_for_ibm\Fertilizers_Recommendation_ System_For_Disease_ Prediction\Dataset Pl
```

```
In [49]: test_datagen_1=ImageDataGenerator(rescale=1)
test_generator_1=test_datagen_1.flow_from_directory(
    test_dir,
    target_size=(128,128),
    batch_size=20,
    class_mode='categorical'
)
```

Found 1686 images belonging to 6 classes.

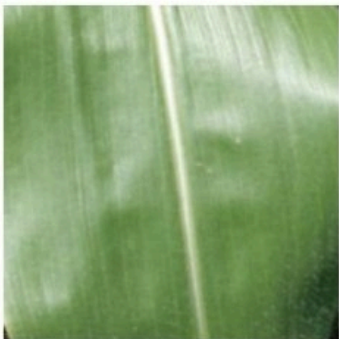
```
In [50]: import numpy as np
from tensorflow.keras.models import load_model
from tensorflow.keras.preprocessing import image
```

```
In [51]: img=image.load_img(r"C:\Users\praveen\Desktop\FILES\data_for_ibm\Fertilizers_Recommendation_ System_For_Disease_ Prediction\Dataset Plant Disease\frui
```

```
In [52]: img
```

In [52]: `img`

Out[52]:



In [55]:

```
img=image.load_img(r"C:\Users\praveen\Desktop\FILES\data_for_ibm\Fertilizers_Recommendation_System_For_Disease_Prediction\Dataset Plant Disease\frui
x=image.img_to_array(img)
x=np.expand_dims(x,axis=0)
y=np.argmax(model.predict(x),axis=1)
index=['Apple__Black_rot', 'Apple__healthy', 'Corn_(maize)__healthy', 'Corn_(maize)__Northern_Leaf_Blight', 'Peach__Bacterial_spot', 'Peach__hea
index[y[0]]
```

1/1 [=====] - 0s 57ms/step

Out[55]: 'Corn_(maize)__Northern_Leaf_Blight'

In [56]: `model.evaluate(test_generator_1,steps=50)`

50/50 [=====] - 4s 76ms/step - loss: 1036.1377 - accuracy: 0.6220

Out[56]: [1036.1376953125, 0.621999979019165]

In []: