

```
test_dir=r'C:\Users\praveen\Desktop\FILES\data_for_ibm\Fertilizers_Recommendation_System_For_Disease_Prediction\Dataset Plant Disease\Veg-dataset\Veg-dataset\test_set'
```

In [2]:

```
import tensorflow as tf
from tensorflow import keras
from tensorflow.keras.preprocessing.image import ImageDataGenerator
```

In [3]:

```
model =
tf.keras.models.load_model(r'C:\Users\praveen\Desktop\FILES\data_for_ibm\Fertilizers_Recommendation_System_For_Disease_Prediction\Dataset Plant Disease\vegetabledata.h5')
```

In [4]:

```
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 3416 images belonging to 9 classes.

In [5]:

```
import numpy as np
from tensorflow.keras.models import load_model
from tensorflow.keras.preprocessing import image
```

In [6]:

```
img=image.load_img(r"C:\Users\praveen\Desktop\FILES\data_for_ibm\Fertilizers_Recommendation_System_For_Disease_Prediction\Dataset Plant Disease\Veg-dataset\Veg-dataset\test_set\Potato___Early_blight\b7157976-61c2-4366-87c5-e3de23aa7c10___RS_Early.B7227.jpg")
```

In [7]:

```
img
```

Out[7]:

In [8]:

```
img=image.load_img(r"C:\Users\praveen\Desktop\FILES\data_for_ibm\Fertilizers_Recommendation_System_For_Disease_Prediction\Dataset Plant Disease\Veg-dataset\Veg-dataset\test_set\Potato___Early_blight\b7157976-61c2-4366-87c5-e3de23aa7c10___RS_Early.B7227.jpg",target_size=(128,128))
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___healthy']  
index[y[0]]
```

```
1/1 [=====] - 0s 172ms/step
```

Out[8]:

```
'Peach___healthy'
```

In [9]:

```
model.evaluate(test_generator_1, steps=50)
```

```
50/50 [=====] - 5s 103ms/step - loss: 2.1039 - accuracy:  
0.1890
```

Out[9]:

```
[2.103949785232544, 0.1889999955892563]
```

In [ ]: