In [1]:
```
test_dir=r'C:\Users\maris_q3mm6nk\Desktop\FILES\data_for_ibm\Fertilizers_Recommendation_ S
```

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\maris_q3mm6nk\Desktop\FILES\data_for_ibm\Fer
```

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\maris_q3mm6nk\Desktop\FILES\data_for_ibm\Fertilizers_Recomme
```

In [7]:
```
img
```

Out[7]:

In [8]:
```
img=image.load_img(r"C:\Users\maris_q3mm6nk\Desktop\FILES\data_for_ibm\Fertilizers_Recomme
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)___N
index[y[0]]
```

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

Out[8]:
```
'Peach___healthy'
```

In [9]:

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 [ ]:
```
```