FERTILIZER RECOMMENTATION SYSTEM FOR DISEASE PREDECTION.

Testing the vegetable dataset

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

In [ ]:
```
model=load_model(r"/content/vegetable.h5')
```

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

In [ ]:
```
img=image.load_img(r'/content/drive/MyDrive/DataSet/Dataset Plant Disease/fruit-dataset/Veg-dataset/Veg-dataset/test_set/Tomato___Bacterial_spot/b004
```

In [ ]:
```
img
```

Out[ ]:

In [ ]:
```
x=image.img_to_array(img)
x=nps.expand_dims(x,axis=0)
```

In [ ]:
```
pred=(model.predict(x) > 0.5).astype("int32")
```

```
1/1 [==============================] - 0s 34ms/step
```

In [ ]:
```
pred
```

Out[ ]:
```
array([[0, 0, 0, 0, 0, 0, 0, 0, 1]], dtype=int32)
```

In [ ]:
```
x_test.class_indices
```

Out[ ]:
```
{'Pepper,_bell___Bacterial_spot': 0,
 'Pepper,_bell___healthy': 1,
```

:
```
{'Pepper,_bell___Bacterial_spot': 0,
 'Pepper,_bell___healthy': 1,
 'Potato___Early_blight': 2,
 'Potato___Late_blight': 3,
 'Potato___healthy': 4,
 'Tomato___Bacterial_spot': 5,
 'Tomato___Late_blight': 6,
 'Tomato___Leaf_Mold': 7,
 'Tomato___Septoria_leaf_spot': 8}
```

:
```
img=image.load_img(r"/content/drive/MyDrive/DataSet/Dataset Plant Disease/fruit-dataset/Veg-dataset/Veg-dataset/test_set/Tomato___Bacterial_spot/b004
x=image.img_to_array(img)
x=np.expand_dims(x,axis=0)
y=np.argmax(model.predict(x),axis=1)
index=['Pepper,_bell___Bacterial_spot','Pepper,_bell___healthy','Potato___Early_blight','Potato___Late_blight','Potato___healthy','Tomato___Bacterial_
index[y[0]]
```

```
1/1 [==============================] - 0s 31ms/step
```

:
```
'Tomato___Septoria_leaf_spot'
```