In [1]:

```
# This Python 3 environment comes with many helpful analytics libraries installed
# It is defined by the kaggle/python Docker image: https://github.com/kaggle/docker-python
# For example, here's several helpful packages to load

import numpy as np # linear algebra
import pandas as pd # data processing, CSV file I/O (e.g. pd.read_csv)

# Input data files are available in the read-only "../input/" directory
# For example, running this (by clicking run or pressing Shift+Enter) will list all files under the input directory

import os
for dirname, _, filenames in os.walk('/kaggle/input'):
    for filename in filenames:
        print(os.path.join(dirname, filename))

# You can write up to 20GB to the current directory (/kaggle/working/) that gets preserved as output when you create a
# You can also write temporary files to /kaggle/temp/, but they won't be saved outside of the current session
```

...

In [2]:

```
import os
import cv2
import shutil
```

In [40]:

```
test_dir1  = '/kaggle/input/malayakew-plant-leaf-dataset/MK/D1/test'
train_dir1 = '/kaggle/input/malayakew-plant-leaf-dataset/MK/D1/train'
test_dir2  = '/kaggle/input/plantnet-300k-images/plantnet_300K/images_test'
train_dir2 = '/kaggle/input/plantnet-300k-images/plantnet_300K/images_train'
```

In [36]:

```
os.makedirs('/kaggle/working/final-dataset-train')
os.makedirs('/kaggle/working/final-dataset')
```

In [8]:

```
file1 = os.listdir(test_dir1)
file1
```

...

In [24]:

```
file2 = os.listdir(test_dir2)
file2
```

...

FOR TRAINING

In [42]:

```
dirs = [train_dir1, train_dir2]
# Destination directory
train_dest = '/kaggle/working/final-dataset-train'

train_src_base_dir1 = train_dir1
train_dst_base_dir1 = train_dest
for root, dirs, files in os.walk(train_src_base_dir1):
    # Set the destination directory
    train_dst_dir1 = root.replace(train_src_base_dir1, train_dst_base_dir1)
    copy_tree(root, train_dst_dir1)
```

In [44]:

```
dirs = [train_dir1, train_dir2]
# Destination directory
train_dest = '/kaggle/working/final-dataset-train'

train_src_base_dir2 = train_dir2
train_dst_base_dir2 = train_dest
for root, dirs, files in os.walk(train_src_base_dir2):
    # Set the destination directory
    train_dst_dir2 = root.replace(train_src_base_dir2, train_dst_base_dir2)
    copy_tree(root, train_dst_dir2)
```

...

In [52]:

```
os.listdir('/kaggle/working/final-dataset-train')
```

...

In [54]:

```
from distutils.dir_util import copy_tree
```

In [55]:

```
from tensorflow.keras.preprocessing.image import ImageDataGenerator
train = ImageDataGenerator(rescale=1./255)
```

In [56]:

```
train_Dataset = train.flow_from_directory(
directory='/kaggle/working/final-dataset-train', # root directory that contains the subdirectories target_size=(224, 2
batch_size=32,
class_mode='categorical' # set class_mode to 'categorical'
)
```

```
Found 60225 images belonging to 243 classes.
```

for testing

In [12]:

```
dirs = [test_dir1, test_dir2]
# Destination directory
dest = '/kaggle/working/final-dataset'
```

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In [13]:

```
src_base_dir = test_dir1
dst_base_dir = dest
for root, dirs, files in os.walk(src_base_dir):
    # Set the destination directory
    dst_dir = root.replace(src_base_dir, dst_base_dir)

    # Copy the directory and all of its contents from the source to the destination
    shutil.copytree(root, dst_dir)
```

...

In [28]:

```
src_base_dir1 = test_dir2
dst_base_dir1 = dest
for root, dirs, files in os.walk(src_base_dir1):
    # Set the destination directory
    dst_dir1 = root.replace(src_base_dir1, dst_base_dir1)
    copy_tree(root, dst_dir1)

    # Copy the directory and all of its contents from the source to the destination
#     shutil.copytree(root, dst_dir, exist_ok=True)
#     shutil.copytree(root, dst_dir1, exist_ok=True)
```

In [57]:

```
os.listdir('/kaggle/working/final-dataset')
```

Out[57]:

```
['1362064',
 '1394513',
 '1400100',
 '1392653',
 '1412697',
 '1464023',
 '1408071',
 '1435260',
 '1361524',
 '1412337',
 '1638998',
 '1439145',
 '1391967',
 '1412659',
 '1391963',
 '1394454',
 '1397305',
 '1358095',
```

In [ ]:

```

```