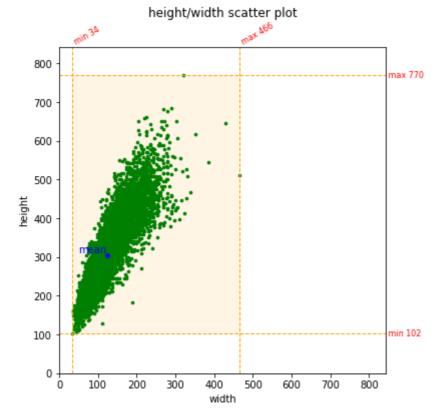
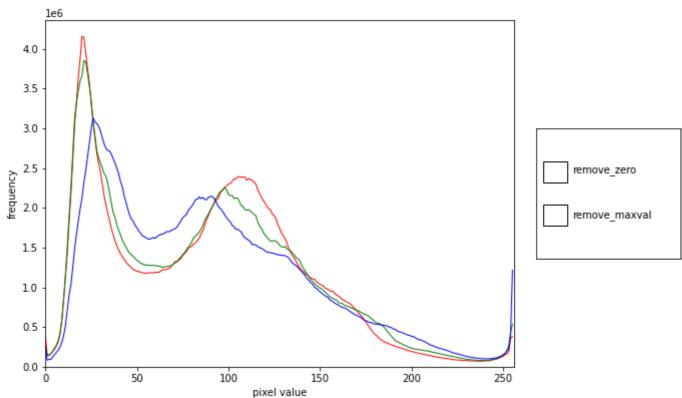
```
In [ ]:
           !pip install pandas
           !pip install basic-image-eda
           !pip install scikit-image
          import pandas as pd
In [10]:
           from basic_image_eda import BasicImageEDA
          data dir = "./datatrain22A/train2 new"
          # BasicImageEDA.explore(data_dir)
          extensions = ['png', 'jpg', 'jpeg']
          threads = 0
          dimension_plot = True
          channel_hist = True
          nonzero = False
          hw_division_factor = 1.0
          print('train images: ')
          BasicImageEDA.explore(data_dir, extensions, threads, dimension_plot, channel_hist, nonzero, hw_di
          train images:
          found 7000 images.
          Using 8 threads. (max:8)
          100% | 7000/7000 [00:09<00:00, 775.91it/s]
          number of images
                                                      7000
          dtype
                                                       uint8
                                                       [3]
          channels
                                                       ['jpg']
          extensions
          min height
                                                       102
                                                       770
          max height
          mean height
                                                       305. 29742857142855
          median height
                                                       288
          min width
                                                       34
                                                       466
          max width
          mean width
                                                       123.07514285714285
          median width
                                                       112
          mean height/width ratio
                                                       2. 4805774869243646
          median height/width ratio
                                                       2. 5714285714285716
          recommended input size(by mean)
                                                      [304 120] (h x w, multiples of 8)
          recommended input size (by mean)
                                                      [304 128] (h x w, multiples of 16)
                                                       [320 128] (h x w, multiples of 32)
          recommended input size (by mean)
          channel mean (0^{\sim}1)
                                                       [0.36166626 0.3658852 0.3834917]
          channel std(0^{\sim}1)
                                                       [0. 23254155 0. 24040939 0. 24047028]
```

eda ended in 00 hours 00 minutes 09 seconds



channelwise pixel value histogram



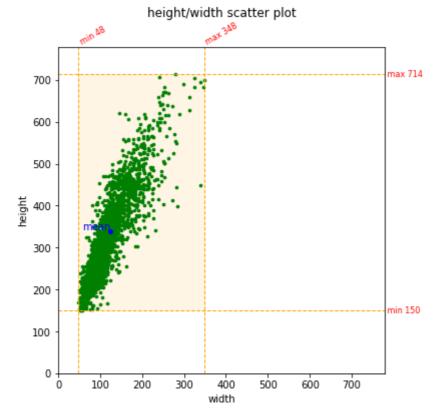
```
'std': array([0.23254155, 0.24040939, 0.24047028], dtype=float32)}
In [11]:
          from basic_image_eda import BasicImageEDA
          data_dir = "./data/test22A_new/"
          # BasicImageEDA. explore (data dir)
          extensions = ['png', 'jpg', 'jpeg']
          threads = 0
          dimension_plot = True
          channel_hist = True
          nonzero = False
          hw_division_factor = 1.0
          print('test images: ')
          BasicImageEDA. explore (data dir, extensions, threads, dimension plot, channel hist, nonzero, hw d
          test images:
          found 2000 images.
          Using 8 threads. (max:8)
          100% | 2000/2000 [00:02<00:00, 718.56it/s]
                                                      2000
          number of images
          dtype
                                                      uint8
          channels
                                                      [3]
                                                      ['jpg']
          extensions
         min height
                                                      150
          max height
                                                      714
          mean height
                                                      338. 116
          median height
                                                      326
          min width
                                                      48
                                                      348
          max width
          mean width
                                                      125.258
          median width
                                                      116
          mean height/width ratio
                                                      2.699356528125948
          median height/width ratio
                                                      2.810344827586207
          recommended input size(by mean)
                                                      [336 128] (h x w, multiples of 8)
          recommended input size(by mean)
                                                      [336 128] (h x w, multiples of 16)
          recommended input size (by mean)
                                                      [352 128] (h x w, multiples of 32)
          channel mean (0^{\sim}1)
                                                       [0.36428225 0.3349935 0.3507986]
```

[0. 23110583 0. 23254822 0. 23205678]

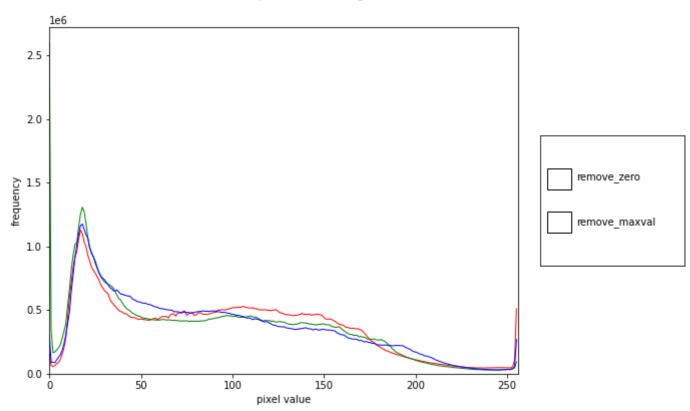
mean': array([0.36166626, 0.3658852 , 0.3834917 ], dtype=float32),

eda ended in 00 hours 00 minutes 02 seconds

channel  $std(0^{\sim}1)$ 



## channelwise pixel value histogram



```
{'dtype': 'uint8',
Out[11]:
           'channels': [3],
           'extensions': ['jpg'],
           'min_h': 150,
           'max_h': 714,
           'mean_h': 338.116,
           'median_h': 326,
           'min_w': 48,
'max_w': 348,
           'mean_w': 125.258,
           'median_w': 116,
           'mean_hw_ratio': 2.699356528125948,
           'median_hw_ratio': 2.810344827586207,
           'rec_hw_size_8': array([336, 128]),
           'rec_hw_size_16': array([336, 128]),
           'rec_hw_size_32': array([352, 128]),
```

'mean': array([0.36428225, 0.3349935, 0.3507986], dtype=float32), 'std': array([0.23110583, 0.23254822, 0.23205678], dtype=float32)}