```
print('-----')
print(img_pred[0][0]+'\n')
img_pred[0][2].show(figsize=(5, 5))
print(img_pred[0][1].to_string(index=False))
print('-----')
```

-----

## Categoria: catterpillar

	Probabilidade
catterpillar	98.576%
beetle	0.915%
butterfly	0.126%
cicadomorpha-bug	0.056%
sports	0.041%
flies	0.040%
wasp	0.030%
bee	0.028%
ant	0.027%
termites	0.021%
animal	0.018%
thrips	0.016%
stink-shield-bug	0.015%
crickets	0.012%
vehicle	0.010%
plant-bug	0.009%
person	0.009%
dragonfly	0.007%
lacewing	0.007%
assassin	0.006%
outdoor	0.006%
food	0.005%
accessory	0.004%
planthopper-bug	0.003%
seed-bug	0.003%
kitchen	0.002%
indoor	0.002%
electronic	0.002%
bed-bug	0.002%
leaf-footed-squash-bug	0.001%
furniture	0.001%
cockroach	0.001%
appliance	0.001%



Categoria: beetle

Classe Probabilidade beetle 79.163% stink-shield-bug 6.396% wasp 2.216% crickets 1.886% plant-bug 1.870% seed-bug 1.453% butterfly 1.363% flies 0.979% catterpillar 0.864% leaf-footed-squash-bug 0.616% cockroach 0.540% bed-bug 0.287% bee 0.225% cicadomorpha-bug 0.214% termites 0.213% ant 0.209% 0.200% assassin person 0.198% lacewing 0.143% 0.129% sports vehicle 0.123% kitchen 0.109% food 0.104% 0.099% accessory furniture 0.092% outdoor 0.061% electronic 0.054% planthopper-bug 0.052% animal 0.037% appliance 0.037% indoor 0.028% dragonfly 0.022% thrips 0.017%

Categoria: flies

```
Classe Probabilidade
                 flies
                             85.363%
                               6.205%
                  wasp
                beetle
                               2.069%
             dragonfly
                               1.012%
                               0.856%
                   bee
                thrips
                               0.663%
      cicadomorpha-bug
                               0.550%
              termites
                               0.513%
                person
                               0.384%
             butterfly
                               0.291%
                sports
                               0.258%
                               0.254%
                   ant
          catterpillar
                               0.220%
               kitchen
                               0.148%
             cockroach
                               0.135%
            electronic
                               0.132%
                               0.122%
             accessory
                  food
                               0.106%
              lacewing
                               0.103%
             furniture
                               0.092%
             appliance
                               0.087%
               outdoor
                               0.085%
               vehicle
                               0.075%
                indoor
                               0.071%
                               0.060%
              crickets
             plant-bug
                               0.060%
                animal
                               0.027%
       planthopper-bug
                               0.018%
               bed-bug
                               0.016%
              assassin
                               0.009%
              seed-bug
                               0.008%
      stink-shield-bug
                               0.006%
leaf-footed-squash-bug
                               0.001%
```



12/2/2019
In [63]: print('----')
print(img\_pred[4][0]+'\n')
img\_pred[4][2].show(figsize=(5, 5))
print(img\_pred[4][1].to\_string(index=False))
print('----')

Categoria: dragonfly

Classe Probabilidade dragonfly 99.717% lacewing 0.090% flies 0.074% 0.054% wasp butterfly 0.016% catterpillar 0.011% beetle 0.009% sports 0.005% 0.004% assassin person 0.003% 0.003% crickets thrips 0.002% ant 0.002% termites 0.001% 0.001% indoor vehicle 0.001% outdoor 0.001% accessory 0.001% electronic 0.001% cicadomorpha-bug 0.001% bee 0.001% furniture 0.000% kitchen 0.000% animal 0.000% leaf-footed-squash-bug 0.000% cockroach 0.000% 0.000% plant-bug planthopper-bug 0.000% seed-bug 0.000% stink-shield-bug 0.000% bed-bug 0.000% appliance 0.000% food 0.000%



Categoria: butterfly

Classe Probabilidade butterfly 97.047% catterpillar 1.816% beetle 0.365% wasp 0.182% 0.070% ant animal 0.062% termites 0.050% crickets 0.047% cicadomorpha-bug 0.038% stink-shield-bug 0.036% bee 0.034% sports 0.029% cockroach 0.028% dragonfly 0.026% flies 0.023% accessory 0.021% outdoor 0.019% vehicle 0.016% seed-bug 0.016% plant-bug 0.015% person 0.011% food 0.006% indoor 0.006% furniture 0.005% 0.005% assassin electronic 0.005% lacewing 0.004% appliance 0.004% kitchen 0.003% leaf-footed-squash-bug 0.002% planthopper-bug 0.002% bed-bug 0.001% thrips 0.001%



Categoria: bee

Classe Probabilidade flies 9.045% 81.120% bee butterfly 5.046% beetle 0.889% 0.887% catterpillar 0.625% wasp crickets 0.401% animal 0.390% cicadomorpha-bug 0.227% thrips 0.200% plant-bug 0.147% indoor 0.125% kitchen 0.107% electronic 0.100% dragonfly 0.095% furniture 0.094% person 0.081% sports 0.076% vehicle 0.058% 0.058% food appliance 0.040% outdoor 0.038% 0.029% ant planthopper-bug 0.024% lacewing 0.021% seed-bug 0.021% accessory 0.018% termites 0.013% leaf-footed-squash-bug 0.008% cockroach 0.005% stink-shield-bug 0.005% assassin 0.004% bed-bug 0.002%



```
12/2/2019
In [68]: print('----')
print(img_pred[7][0]+'\n')
img_pred[7][2].show(figsize=(5, 5))
print(img_pred[7][1].to_string(index=False))
print('----')
```

-----

Categoria: cockroach

```
Classe Probabilidade
             cockroach
                              73.375%
                               6.981%
                 flies
             plant-bug
                               5.170%
              crickets
                               2.037%
              assassin
                               1.725%
                               1.627%
                 thrips
             butterfly
                               1.373%
                  wasp
                               1.113%
               vehicle
                               0.805%
                beetle
                               0.779%
               bed-bug
                               0.675%
              lacewing
                               0.650%
             appliance
                               0.525%
              termites
                               0.436%
               seed-bug
                               0.356%
                    ant
                               0.270%
                person
                               0.262%
                kitchen
                               0.221%
             furniture
                               0.208%
               outdoor
                               0.195%
       planthopper-bug
                               0.177%
leaf-footed-squash-bug
                               0.150%
      stink-shield-bug
                               0.145%
      cicadomorpha-bug
                               0.124%
                indoor
                               0.112%
             dragonfly
                               0.085%
             accessory
                               0.073%
          catterpillar
                               0.070%
                   food
                               0.068%
                animal
                               0.064%
                 sports
                               0.061%
                    bee
                               0.044%
            electronic
                               0.043%
```

\_\_\_\_\_



12/2/2019
In [99]: print('----')
print(img\_pred[12][0]+'\n')
img\_pred[12][2].show(figsize=(5, 5))
print(img\_pred[12][1].to\_string(index=False))
print('-----')

Espécie: wasp

```
Classe Probabilidade
                              75.214%
                  wasp
                               6.567%
                  flies
                    ant
                               2.080%
                beetle
                              13.344%
                               0.935%
                    bee
             butterfly
                               0.250%
              lacewing
                               0.171%
                person
                               0.164%
              seed-bug
                               0.151%
          catterpillar
                               0.130%
             plant-bug
                               0.088%
      cicadomorpha-bug
                               0.082%
leaf-footed-squash-bug
                               0.081%
             dragonfly
                               0.076%
              assassin
                               0.075%
            electronic
                               0.069%
               vehicle
                               0.069%
                sports
                               0.056%
                 indoor
                               0.050%
              crickets
                               0.046%
              termites
                               0.042%
                               0.042%
             accessory
               kitchen
                               0.037%
             furniture
                               0.034%
                   food
                               0.033%
                thrips
                               0.031%
             appliance
                               0.029%
               outdoor
                               0.025%
      stink-shield-bug
                               0.011%
             cockroach
                               0.005%
               bed-bug
                               0.005%
                animal
                               0.004%
       planthopper-bug
                               0.003%
```



12/2/2019
In [100]: print('-----')
print(img\_pred[11][0]+'\n')
img\_pred[11][2].show(figsize=(5, 5))
print(img\_pred[11][1].to\_string(index=False))
print('-----')

Espécie: bee

Classe Probabilidade beetle 6.416% 53.955% bee catterpillar 2.487% butterfly 2.279% 16.207% wasp flies 16.187% ant 0.482% thrips 0.397% dragonfly 0.216% cicadomorpha-bug 0.215% plant-bug 0.177% termites 0.109% electronic 0.097% crickets 0.086% person 0.086% indoor 0.085% furniture 0.071% sports 0.054% lacewing 0.048% seed-bug 0.046% accessory 0.042% kitchen 0.039% vehicle 0.038% food 0.035% animal 0.033% outdoor 0.024% appliance 0.024% stink-shield-bug 0.023% assassin 0.012% bed-bug 0.010% leaf-footed-squash-bug 0.009% planthopper-bug 0.008% cockroach 0.004%



Categoria: vehicle

Classe Probabilidade beetle 6.473% furniture 5.932% indoor 4.284% plant-bug 3.898% 22.671% vehicle flies 2.567% electronic 2.463% appliance 2.305% sports 2.103% outdoor 14.818% 11.574% butterfly 10.191% person accessory 1.973% 1.473% food kitchen 1.315% bee 1.083% animal 0.969% cockroach 0.738% ant 0.573% cicadomorpha-bug 0.524% 0.360% wasp planthopper-bug 0.301% termites 0.275% catterpillar 0.248% seed-bug 0.198% stink-shield-bug 0.179% thrips 0.173% leaf-footed-squash-bug 0.110% bed-bug 0.073% dragonfly 0.043% crickets 0.041% 0.037% assassin lacewing 0.035%



Categoria: catterpillar

Classe Probabilidade catterpillar 54.985% 3.618% ant dragonfly 2.382% 2.203% flies beetle 15.935% butterfly 14.612% crickets 1.445% bee 1.026% termites 0.795% wasp 0.686% cicadomorpha-bug 0.427% outdoor 0.307% plant-bug 0.171% stink-shield-bug 0.162% vehicle 0.149% thrips 0.145% cockroach 0.132% seed-bug 0.123% animal 0.086% electronic 0.081% person 0.077% indoor 0.071% leaf-footed-squash-bug 0.058% sports 0.053% appliance 0.047% furniture 0.045% accessory 0.037% kitchen 0.037% assassin 0.034% lacewing 0.025% planthopper-bug 0.018% food 0.016% bed-bug 0.014%