## Tree phenology monitoring

To assess temporal variation in food availability and forest productivity in a study site c. 1500 trees in a 2ha phenology plot are checked monthly for the presence and abundance of flowers, fruit and young leaves. In Tuanan, for example, the plot is situated along two transects in the center of the study area. ALL trees within 5 m on either side of the transects and with a diameter at breast height (dbh) of $\geq 10$ cm have been labeled with a number, measured and identified.

## Phenology Crop Sizes

## Young leaves (daun mudah)

Estimate the percentage of the leaves on a tree that are new in that month. Try to score new leaves only once! (Thus check current crop against that of last month).
$0 \%=0$
$0<\mathrm{YL}<5 \%=2.5$
$5<\mathrm{YL}<25 \%=15$
$25<\mathrm{YL}<50 \%=37.5$
$50<\mathrm{YL}<75 \%=62.5$
$75<\mathrm{YL}<100 \%=87.5$


Flowers (bunga)
Estimate the number of flowers in the tree. This scale is deliberately crude because numbers can change from day to day, and once-a-month monitoring cannot be more precise.

None (tidak ada) $=0$
Few (sedikit) = 1
Medium $($ sedang $)=2$
A lot (banyak) = 3


## Fruits (buah)

Estimate the number of fruits in a tree and indicate ripeness:
$\mathrm{M}=$ ripe (masak) ; $\mathrm{m}=$ unripe (mentah)
$0=0$
$1-10=1+$
$10-100=10+$
$100-1000=100+$
$1000-10000=1000+$
Etc...


