



National Agricultural Research Institute

Harvesting Ripe Vanilla Beans



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Copies of this toktok and further information
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THE INSTITUTE

The National Agricultural Research Institute (NARI) was established by an Act of the National Parliament of Papua New Guinea in July 1996 as a publicly funded, statutory research organisation, to conduct applied and development oriented research on food crops, alternative food and cash crops, livestock and resource management issues. Besides applied and adaptive research, NARI is responsible for providing authoritative technical, analytical and diagnostic services and up-to-date information to the entire agriculture sector in PNG. The major targets are the smallholder semi-commercial farmers in the country.

The mission of NARI is to contribute, through applied research and technical services, to the development of the agriculture sector and realisation of the national goals by identifying, adapting and transferring agricultural technologies and information, so as to:

- Enhance the productivity, efficiency and sustainability of the smallholder agriculture, and
- Improve farmer income, food security and welfare of Papua New Guineans and the nation.

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If the vanilla is being sold as green beans to a curing processor, it is often harvested, stored for a day or two, transported to the curer, stored for another day or so until the processor has enough beans to cure as a batch before the curing is started. If it is more than two to three days after harvest before the curing process begins then the quality of the cured beans will be very low.

It is recommended therefore that the curing process must be started within two days of harvesting ripe vanilla.

There is therefore a need for local vanilla curing processors to be located in each vanilla growing area and these processors need a good supply of quality ripe vanilla beans from farmers to ensure good quality processing.

Vanilla Curing must begin within two days of harvesting

Once you have harvested vanilla beans, you should begin processing them or sell them to a green bean buyer as soon as possible. The curing should start within two days after the harvest.

There is a common belief that vanilla beans will store for some time before you commence curing them without the quality of the vanilla being reduced. **This is not correct.** This belief is because there is often no change in appearance of harvested immature beans (which should not be harvested but currently are being harvested) over a number of days.

The quality of vanilla begins to decrease rapidly after two days following harvest if the curing process has not been started. After two days the sugar and energy reserves in the bean become low and the production of vanillin and quality will be reduced during the curing process. There is also a higher risk of moulds developing during curing.

Ripe *Planifolia* Vanilla beans are also likely to split if the beginning of the curing process is delayed after they are harvested. This reduces their quality grade and hence value.

Harvesting Ripe Vanilla Beans

To get the best quality from your vanilla, the beans have to be harvested at the right time. The harvesting of immature green vanilla beans appears to be very widespread in PNG with the majority of farmers harvesting beans well before they are ripe.

The quality of vanilla cured from immature green beans is extremely low and of little value to buyers. If vanilla is harvested immature then very little vanillin (flavouring compound in vanilla) will develop in the beans during the curing process. This will result in very low quality vanilla produced. In addition, vanilla that is harvested immature is more prone to moulds during the curing process and in storage. This further reduces the quality of vanilla.

It is impossible to get good quality vanilla from immature beans. Immature beans are not worth processing, as they will have very little value to international buyers.

If immature beans are harvested, processed and sold, the PNG vanilla industry will get a reputation for producing poor quality vanilla and farmers may not be able to sell their vanilla as buyers will either stop buying it or the price paid to farmers will be much lower than the world price.

Only beans that are clearly mature as described below should be harvested. Even if beans turn light green, they still may not be mature and if harvested will produce little vanillin. So, they should be left on the vine to ripen.

When to harvest Vanilla

Planifolia vanilla beans should be harvested when the end furthest from the vine starts to turn **yellow** (not light green) as shown on the opposite page 5. In some cases the end may begin to split open. This is not bad if the bean is harvested when the split is still very small. If the bean is left longer on the vine, it will split completely. Split beans are not preferred although they contain higher vanillin content and are very good for producing vanilla essence. They are not considered 'A' grade which can be sold for a premium in the whole bean market.

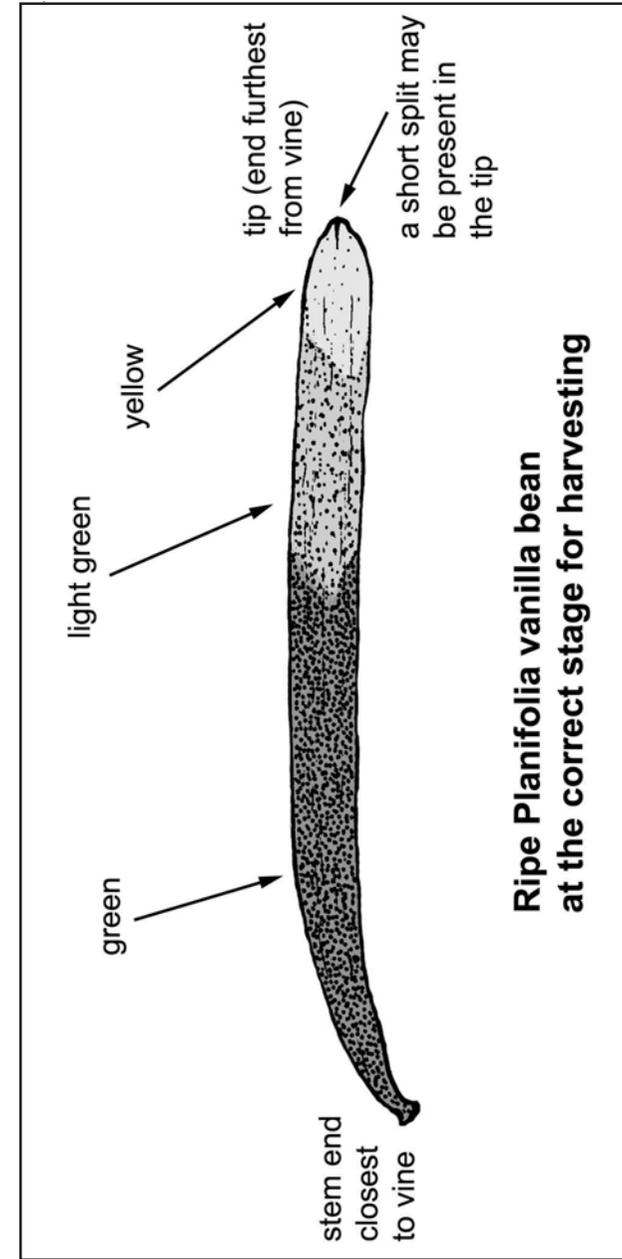


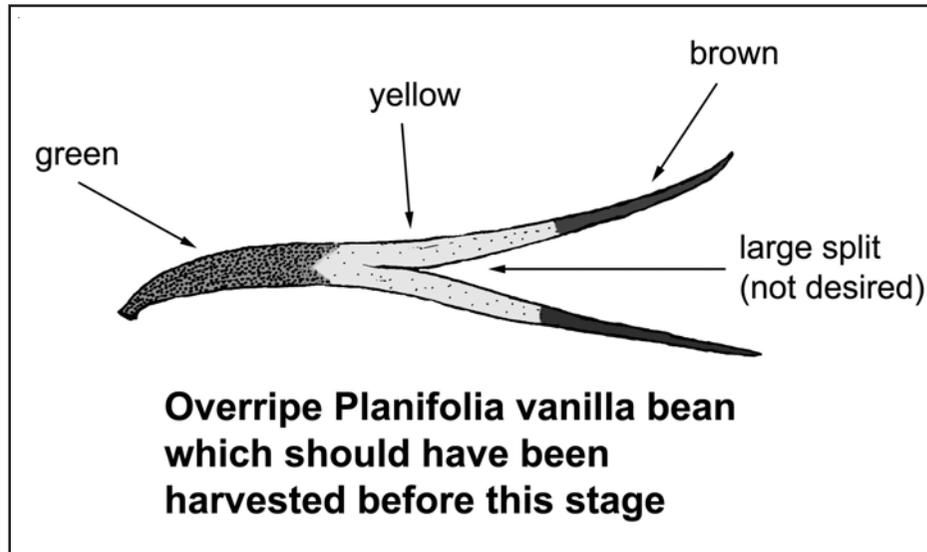
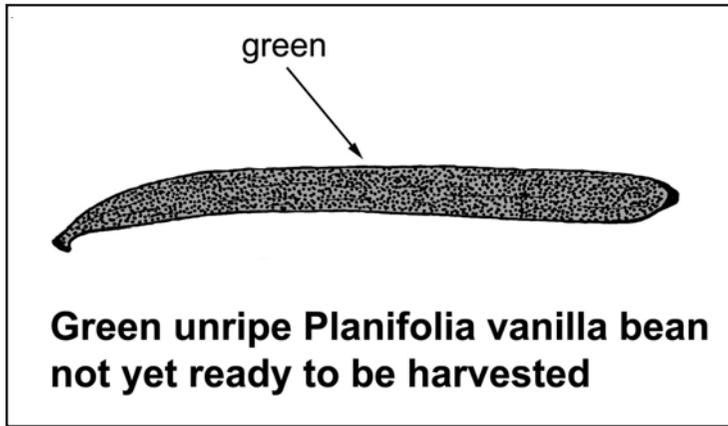
How to pick Vanilla

Only the mature beans as described before should be harvested from the bunch. All other beans are left on the bunch and are **harvested individually** as each one fully matures. **Do not harvest all the beans (the whole bunch) together.**

To pick a bean hold the bunch in one hand so the bunch will not be damaged or broken off. With the other hand hold the mature bean at its base near the stem and bend it backwards (up the stem) to break it from the flower branch. The bean should break off cleanly.

If the bean is not broken off cleanly or is broken too far up the bean, moulds may enter the bean during curing.





Tahitensis vanilla beans do not split on the vine and can be left on the vine until the beans ripen to a stage where the **bottom third of the bean** (furthest from the vine) is **brown**, and the **middle third** is **yellow** and the **top** is **still green**.

