

## THE HARVESTING MOMENT IS AN AGRO TOURISM ON THE WINGED BEAN CULTIVATION

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### ABSTRACT

The cultivation of winged bean (*Psophocarpus tetragonolobus*) plant is never done largely at special landscape like a long nourishing bean (*Vigna radiata*), because of its habits as biannual plant which is had a long duration for growing and being temporary died at the end of the life period. The main harvest as vegetable was young pods which its colour light green and crispy texture mass. When the plant started to flowering which entirely became fruits, the new flowers still raise of new other stalks, so the number of pods became high but not same ripen. If at that moment the fruits which the same ripen condition for vegetable was happen, it must to be cut off at once togetherness. Some kinds like that when we cultivated winged bean by intercropping with white saffron (*Curcuma mangga*) on an experimental research for about 1,000 m<sup>2</sup> which divided by 27 experimental units, was cut off the pods needed many spontaneously worker for about 10 men. By its happened we have an idea to promote that harvesting young pods season as an agro-tourism object.

### WINGED BEAN CULTIVATION BY INTERCROPPING SYSTEM

In traditional people life which lived in the village like at Java land, they always plant some kind of plants with each special purpose together at the front or back yard of the house. The plants are vegetables, medicine herbs, fruits and also woods of fuels which performed naturally as multi-cropping system.

Base on that event we practiced to plant winged bean as vegetable which combined with white saffron as medicine herb on the special landscape. By each habitual of that plants, the aimed of cultivation is to know the influenced of the winged bean trellis heights and the added of white saffron plant densities, on the plants growth and yield. The highest yields of the one kind of treatments combination is as the conclusion of the idealistic plants mixed proportion on intercropping system. The intercropping experiment of winged bean and white saffron was done at KP4 (Kebun Pendidikan, Penelitian dan Pengembangan Pertanian Universitas Gadjah Mada Yogyakarta, Kalitirto, Berbah, Sleman, Daerah Istimewa Yogyakarta) since January up to September, 2002 which the experimental pattern is Randomized Complete Block Design which used two factors as treatment are 1 m and 2 m trellis height for winged bean and four kind of white saffron population density by 0%, 33.33%, 66.66% and 99.99% of its fixed population density which added to winged bean population to made any proportion plants as an additive series multiple cropping system.

The winged bean has fruit-bearing between June until August, at these region because Yogyakarta as apart of the southern tropic when the sun on 21<sup>st</sup> of June was orbiting over 23.5 degrees North, being short day season till April until September which influenced the plant to blossom the flowers which growing steps by steps. Depend on that reason, so cultivating of winged bean as the vegetable plant is a unique work because this work was modification biannual plant as annual plant by notify the geographical zone. The young pods was the main harvest had to be cut off from the plant at the right time because if it done too late, the pods would be stiff and not suitable for consumption. It always happen some pods not cut off yet, so the pods would be old and dry which producing dried seeds. These seeds could be substitution the needs of soy seeds on food production such as milk, yoghurt, tofu and tempe.

At the other hands, white saffron had rhizomes as the yields for it cultivation, was developing since growing by the base of plant which is called it as *empon-empon*. To harvest the rhizomes is, by pick off it from the ground. Commonly is digging the soil around the plant by soil-fork for easily got the rhizomes or pulling the whole body plant by hands until the rhizomes picked off. This work was needed hard power may not suitable for agro-tourism.

Back to the winged bean, young pods production that harvested in several times, expose in the table 1.

Table. 1: The Winged Bean Pods Total Weight in 32 Weeks of Ages (kg/ha)

Treatments	Total Weight
Trellis of 1 m height:	
100 % winged bean + 0 % white saffron	26417.8092 a
100 % winged bean + 33.33 % white saffron	22956.9381 a
100 % winged bean + 66.66 % white saffron	24693.2565 a
100 % winged bean + 100 % white saffron	25759.4291 a
Trellis of 2 ms height:	
100 % winged bean + 0 % white saffron	25988.7178 a
100 % winged bean + 33.33 % white saffron	28905.6331 a
100 % winged bean + 66.66 % white saffron	24665.2170 a
100 % winged bean + 100 % white saffron	24470.4630 a

Note: The values in the column with the same letter-code was indicated no significance by DMRT 5%.

The table 1 shows that the total weights of all treatments no differences each others, but the highest value was shown on 100 % winged bean with 2 ms trellis height + 33.33 % density of white saffron treatment

## CONCLUSIONS

By looking at the table 1, there are no differences values of the total weight of the winged bean production, base on statistical analysis, so if we would prepare the winged bean cultivation for an agro-tourism, its better to choose the 100 % winged bean population with 1 m trellis height + 0 % density of white saffron plant treatment, ISAD, Yogyakarta, INDONESIA, December 6-8, 2011

because it means was solely and low, the winged bean plantation which aim for easy to harvesting the product. The experienced of plantation winged bean and white saffron by intercropping was difficulty on keeping the winged bean for not twisted to white saffron. The peak season of winged bean pods harvest as the object of the agro-tour, it would funny moment because by the plant height which not higher than chest of men, the harvester must to bend of their back while to part to look for the fruits which cover by young stalk leaves, or sometime they have to squat for to do that. Yes, the plantation was too dense, because every new young stalks which grow after, they was not have any upper of trellis to twist, so they fallen to them old body by their weight. On that moment, with the local climate which freshly and warm morning air, because it was an early dry season, its also making happy feeling to anyone who joint to be harvester. While they were harvest it possible for them to talk any gossip each others if they were close, and sometime the one shout out to agree about the topic to another one else, even though she or he maybe not known about it, because not close by the position was at the other side of the farm. Of course, it makes noise laughing. The equipments which should to carry out by the harvester was a knife or a scissor as a cutter, a basket or a handy poly bag and also wearing a traditional bamboo head cap to protect from sunlight and also friction with any kind of hard things that could make harmful. Surely, harvest the winged bean pods was an interesting agro-tourism.

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