

20th October 2005

Dear Paolo

I would like to personally thank you for all your assistance with our saffron research, & also to congratulate you & your wife on your first born. Therefore, please accept this small gift from me. It is made in Qala-i-Naw, the home town of Peshtaz (Ghulam) & is the location of our saffron trials.

Enclosed are also some photos of the saffron in our nursery cultivated under the "l'Aquila way".

Unfortunately we were not able to get the farmers to replicate this system this year, so our yield from the nursery will be small. However, would you still be willing to sell our 'Afghan saffron' under your website?

I would be very grateful for your advice on the stage of growth from the nursery photos (taken 16 Oct).

Also enclosed is the report/guide I prepared from my trip in August, just for your interest.

Many thanks again

Justin

EURR Project**Trip Report on Saffron Cultivation****28th July – 8th August 2005****Introduction**

Following the visit made in June to Peltuinum, L'Aquila, Italy by Justine Brett (please see trip report for details), a further visit was made during the cultivation period to learn the techniques.

Efforts had been made to have Ghullam Sakri, Agricultural Extensionist also make the field trip. Unfortunately, despite completing all the required paperwork for the Italian Embassy, including purchasing of the necessitated health insurance, the visa was not issued in time for the planting period.

Itinerary

28 th	Travel Herat to Kabul
29 th	Travel Kabul to Dubai
30 th	Travel Dubai to L'Aquila, Italy
1 st – 6 th	Field work with Pier Paolo Visione, Peltuinum and completion of necessary paperwork for harvest period visitation by Ghullam Sakri
7 th	Travel Italy to Dubai
8 th	Travel Dubai to Herat

Overview

The aim of the trip was to learn the cultivation technique of growing saffron under an annual methodology. This practice is unique to L'Aquila, and as such, yields a better quality product and demands a higher price. The terrain, altitude and climate are similar to that in Afghanistan, although not quite as hot and dry. However, saffron originates from Persia and more arid conditions are preferred. Soils should be light and soft.

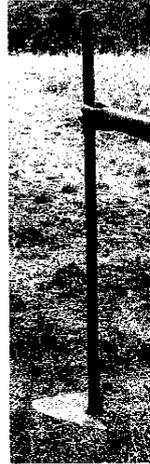
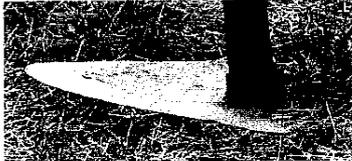
Time was spent with Pier Paolo Visione in actively participating in all parts of the cultivation process, right through from bulb extraction from the ground, cleaning, treating (chemical), planting and fencing.

This report will provide details of this entire process, and will serve as a learning tool to be replicated in Afghanistan.

If this can be carried out, Mr Visione is willing to buy up to 1kg of saffron in January 2006, and sell via his website as Afghanistan saffron as a trial. However, the cultivation must be done according to this annual method in order for him to buy.

Tools Needed

- Strimmer / Scythe
- Hoe
- Pickaxe
- 2 stakes & string

**Bulb Harvest**

Following the harvest period last October/November, the field will have been left, and hence will be overgrown with weeds. These should be slashed using a strimmer or hand scythe and the roots left to dry in the sun.



Field Before Strimming



Field After Strimming

Remnants of the furrows will now be visible. Knowing that the planting followed the pattern of empty row, two rows bulbs, empty row, two rows bulbs, etc, stand in the first empty row and gently pull back the earth from the first bulb row using the edge of the hoe until the tufts or “moustaches” of the saffron bulbs are exposed. Do not go down any deeper. Once the entire row has exposed the moustaches, use a pickaxe to gently loosen the earth around it. Be very careful not to damage the bulbs.



Pulling back the earth



Using the pickaxe to loosen the bulbs

A second person should go along and handpick the bulbs, placing them in a string bag so that they can 'breathe'.

Bulb Preparation

The bulbs then need to be cleaned. This can be done back at home. Each bulb should be gently rubbed with the thumb and index finger to remove the excess "coats" of the bulb. Also, any debris from the root point of the bulb should also be removed.



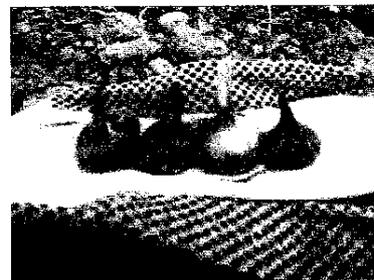
The bulbs will have several coats



Remove extra coats by hand



4 bulbs before cleaning



4 bulbs after cleaning

The bulbs need to be treated just prior to planting with an appropriate fungicide/pesticide which will protect against known diseases in the locality. In L'Aquila, they use the Bayer product Octave.



Fungicide used



Bath where the bulbs are soaked for 20 minutes

Field Preparation

The field where the bulbs have been extracted should not be used for saffron production for up to 5 years.

The field for planting should be prepared in advance, with sufficient sheep (preferred) manure and ploughing repetitions to produce a very soft, light soil and smooth seed bed.



Prepared field for planting



The light soil can easily be moved with a hoe

Planting**STEP 1**

Using two stakes and a length of string, lay out a guidance line to ensure that the digging/planting is kept straight.

Using a hoe, dig the first row along the string line to a depth of the hoe head (approximately 5cm). It is important that the same hoe is used for the entire process to ensure uniformity in depth.

**STEP 2**

Fill a bucket with the bulbs, and sprinkle along the trench which has been dug.

**STEP 3**

Using your hands, place the bulbs in the ground in a single row so that the moustaches are upright and each bulb is touching its neighbour.



STEP 4

Backfill the first row and thereby create the 2nd row.

Plant the bulbs as described above.

The rows will be dug by going back and forth, each time creating a new line.

**STEP 5**

The 3rd row should be dug but left empty. This will be the trench along which to walk when harvesting. On no account should the planted bulbs be trodden on because this will compact the soil, which is bad for the bulbs. Therefore if the rows need to be crossed, it must be by stepping from trench to trench.

The row should then be widened. This will provide more space for walking along when it comes to harvest time.

**STEP 6**

Repeat steps 1 to 5 so that it becomes:

- Plant row 1
- Plant row 2
- Widen row 3 but do not plant

The string line must be redone at the start of each repetition to ensure that the row direction is maintained.

Remember to go back and create a trench beside the first planted row. This will define the rows better and provide a gully to walk along during harvest.



COMPLETED FIELD



The final planted field. The wider empty trenches, which are the “walkways”, are clearly visible dividing the two planted rows.

In Italy, the planted area is then fenced off with orange holed plastic sheeting due to the problem of wild pigs. Also, saffron is a high value crop which must not be trodden on. Therefore, it is advisable to fence the planted area, as seen in the photos of the field where the bulbs were harvested.

Shakafan Nursery WVI
Seed: Suffron
Origin: Iranian
Method of planting: Italian method
Date of planting: 17, 8, 05
Area: 30 m²



