

Effect of CaTs® and KTS® on improving yield and nut characteristics of walnut

SERVICES AGREEMENT (FIELD TRIALS)

Between

Dr. Asghar Soleimani , Temperate Fruits Research Center, Horticultural Sciences Research Institute, Karaj, Iran
Hereby presented by DR Soleimani
Hereafter called DR Soleimani

And

Tessenderlo Group NV/SA, having its registered office at Troonstraat 130, 1050 Brussels, Belgium, registered with the Crossroads Bank of Enterprises ("Kruispuntbank van Ondernemingen") under number 0412.101.728,

Hereby represented by

Dr. Robab Ghahramanzadeh, Agronomy manager hereafter called TG; Individually referred to as the "Party" and collectively as the "Parties".

Project: field experimentation on the benefits of soil application of CaTs and KTS on Walnut

Production

Duration: 1 year, starting April 2023 (hereinafter referred to as the "Project")

Therefore, it is agreed as follows:

2. Trial protocol

2.1 Introduction

The goal of this trial is to evaluate the effect of CaTs and KTS soil application in drip irrigation on crop productivity in Walnut orchard in Iran.

Objective: To evaluate the effect of CaTs and KTS, on Walnut yield and quality

2.2 Material and methods

Location: Zanjan, Iran **Materials**: CaTs and KTS

Plot size: 8000 M² (2000 m² for each treatment)

Crop/Variety: Walnut / Chandler

2.3 Treatments

Treatment 1 (Control): Farmer practices: 50 kg Potassium and Calcium nitrate, 50 Kg/ha SOP, 150 kg/ha solo potash (used by drip irrigation) + 7.5 L/ha hi potash (foliar application).

Treatment 2: Treatment 1 (replace Potassium and Calcium nitrate by CaTs). two split applications of 100 L CaTs/ha: 75 L/ha before Bud Break (begin April) and 25 liters/ha at Shell Hardening (begin May)

Treatment3: Treatment 1 (replace 75 kg of solo potash by 100 lit/ha KTS). Two X 50L/ha KTS: 50 L/ha in mid-May (leaf development) and 50L/ha in mid-June (kernel growth)

Treatment 4: T2+ T3

Soil treatments will be applied through Drip irrigation

2.4 Variables to be evaluated

The following variables will be evaluated: fruit set, nut yield, kernel yield, kernel percentage, kernel color, shoot annual growth, increase in canopy diameter, leaf fall, together with analysis for determining the nutrient elements in soil and plant.

Other observational information on diseases or pests will be provided along with photographic data and accurate information on method of application, water, dilution rates, and spray pressure and weather conditions.

3. Price, invoicing & payment

The total price to be paid for this Project is € 1500, which will be paid in two installments: 50% at the beginning, in April 2023, coinciding with the onset of the experiments and the remaining 50% at the submitting of the final report in April 2024. This price includes:

In case the agreement is terminated prematurely for reasons attributable to DR Soleimani, nothing shall be due by TG and monies already paid shall be repaid within 10 business days of termination. In case the agreement is terminated prematurely for reasons attributable to TG, such proportion of the contract price shall be paid as the works already performed represent in the total works which were to be performed under this agreement.

Payments will be done electronically to Account:

Name: Asghar Soleimani

Bank account number: 647193553

Located in Karaj

Shaba No. IR69016000000000647193553

Payment for the trial will be made in Rials (the Nima rate) by **Bazargan Kala**, on behalf of TG having its registered address at 4th floor, no.10,Eat 7th St., Seoul St. Tehran, and registered in Iran.

4. Duration & termination

4.1 Duration

This agreement cannot be extended unilaterally. Tacit extension shall never be possible. The agreement enters into force on the date of signature and shall be valid until submission of the final report in April 2024.

5. Duties and responsibilities of the Parties

DR Soleimani shall implement the Project in accordance with above terms and specifications and according to best industry standards, and will inform the other Party of any problem that may arise therefrom. DR Soleimani shall make sure that TG representatives will have free access to the experimental sites at any time provided a 3 weeks' notice is given beforehand to DR Soleimani. DR SOLEIMANI shall regularly inform TG of the progress in their work.

TG shall organize a visit of the field experiment by the coordinator of the Project. TG shall grant DR Soleimani access to its expertise on the topic covered by this agreement. TG shall assist DR Soleimani in all problems that may arise from the implementation of the Project.

6. Language of agreement and copies

This agreement is made out on 11-04-2023 in English language only, in two originals, one for DR Soleimani, and one for Tessenderlo Group.

Dr Soleimani

On behalf of Tessenderlo Kerley International part of Tessenderlo Group:

Dr. Robab Ghahramanzadeh

Agronomy Manager

Tessenderlo Kerley International, part of Tessenderlo Group Troonstraat 130 – 1050 Brussels, Belgium Page 3 of 4