



# RESPUESTAS A LAS OBSERVACIONES DEL INFORME TÉCNICO CONSULTORÍAS DE INNOVACIÓN 2019

Nombre de la consultoría de innovación
ASESORÍA DE EXPERTO PARA VALIDAR MANEJO INTEGRADO DE DROSOPHILA SUZUKII: APLICANDO LA EXPERIENCIA DE ESTADOS UNIDOS EN CHILE
Código FIA
COC-2019-010
Fecha de realización de la consultoría
6 al 12 de octubre de 2019
Ejecutor
Instituto de Investigaciones Agropecuarias (INIA)
Coordinador
Luis Devotto Moreno
Nombre del consultor (es)
Marco Valerio Rossi
Firma del coordinador





# 1. Recomendaciones técnicas del consultor

The region I visited can be divided in two well-defined areas:

- · Area 1: east of National Highway N° 5. Well irrigated area, with many water ways and channels sided by heavy bushes of blackberry, not cultivated fruit trees, small raspberry orchards owned by small growers, medium to large blueberry orchards and other fruit crops (apple, vineyards, kiwi, etc.) .
- · Area 2: west of National Highway N° 5. A less populated area, dominated by savannah landscape very similar to Southern California. The flora is typical of very dry environments, few wild hosts and not cultivated hosts are present.

# AREA 1

I have two main concerns in this area: the very patchy landscape and the small berry growers. The highly heterogeneous landscape here could provide SWD with many alternative hosts year around, in an echeloned way. Soft winter temperature and a constant source of food and reproduction sites could create an almost constant pressure to commercial orchards. As it was observed in Northern Italy, people that consider berry growing as a second job don't harvest the fruit when the price drops and I am concerned that something similar could occur here.

### I recommend:

- To search, collect and mass-rear natural enemies of SWD, especially pupal parasitoids, as the only way to obtain a permanent effect on wild hosts and not cultivated areas, which are beyond spraying with chemical insecticides because of environmental, practical and cost reasons.
- To launch a strong campaign of extension focused towards small growers.
- To launch an strong campaign of extension focused towards medium and large growers in order to be able to monitor and identify the pest.
- To fund efficacy trials of the main active molecules already authorized by SAG, but based on data obtained in America and Europe, not Chilean conditions.
- To replace old raspberry varieties with new ones, especially if the latter include the whole technological changes: weedmat, less canes per meter, more firm fruit, less dropped fruit, etc.
- To encourage a more frequent harvest





# AREA 2

The xerophytic flora here should offer fewer resources to SWD than area 1, but I got some information about native fruits used by SWD, like "boldo". The late spring and summer environmental conditions should deter the development of SWD, but this has to be confirmed through monitoring.

### I recommend:

- Increase the capability of growers to monitor both vinegar traps and fruits, using the salt/water method.
- Test the quality of wild fruits as reproduction sites of SWD before to advise their removal.
- To search, collect and mass-rear natural enemies of SWD, especially pupal parasitoids, to release them inside the orchards.
- To fund efficacy trials of the main active molecules already authorized by SAG

I would be glad to hear from you in the future and respond to further requirements of Chilean agencies. With best regards

Marco Valerio Rossi Stacconi Oregon State University





# 2. Listado de destinatarios de las recomendaciones técnicas

Las recomendaciones técnicas hechas por el consultor serán enviadas a las siguientes personas:

Sra. Carolina Torres, SEREMI de Agricultura, Región del Maule

Sr. Fernando Bórquez, SEREMI de Agricultura, Región de Ñuble

Sr. Luis Fernando Pinochet, Director Regional, Servicio Agrícola y Ganadero, Región del Maule

Sra. Marcela Loyola, Encargada Regional D. suzukii, Servicio Agrícola y Ganadero, Región del Maule

Sr. Claudio Moore Tello, Servicio Agrícola y Ganadero, Región de O'Higgins

Sra. Isidora Meléndez, Servicio Agrícola y Ganadero, Región de O'Higgins

Sra. Ruth Castro, Programa Moscas de la Fruta, SAG

Sr. Marco Muñoz, Jefe Departamento Sanidad Vegetal, SAG

Sra. Julia Pinto, Gerente Técnica Comité de Arándanos

Sra. Paula Irles, Directora Proyecto FIC Plataforma Colaborativa en D. suzukii, U. de O'Higgins