

#### **STAY REPORT**

# 1. Delegation composition, visited institutions and dates.

# **Composition of the delegation**

| Num. | Name         | Institution | Position             |
|------|--------------|-------------|----------------------|
| 1    | Wenyong Li   | NERCITA     | PhD, Engineer        |
| 2    | Zhenfa Li    | TJCC        | Director, Professor  |
| 3    | Qingyu Xue   | TJCC        | Engineer             |
| 4    | Yan'an Wang  | SDAU        | Professor            |
| 5    | Shuhan Cheng | SDAU        | Professor            |
| 6    | Yurong Zhao  | SDAU        | Associated Professor |

(\* As the most of the stays have been collective visits, reports are structured by delegation in order to simplify management; in the case of a single person stay, just use one line; include as many lines as people composed the delegation \*)

# Full period of stay

| Num. | Name         | Start Date*          | End Date**           |
|------|--------------|----------------------|----------------------|
| 1    | Wenyong Li   | Aug 29 <sup>th</sup> | Sep 13 <sup>th</sup> |
| 2    | Zhenfa Li    | Aug 29 <sup>th</sup> | Sep 3 <sup>rd</sup>  |
| 3    | Qingyu Xue   | Aug 29 <sup>th</sup> | Sep 3 <sup>rd</sup>  |
| 4    | Yan'an Wang  | Aug 29 <sup>th</sup> | Sep 3 <sup>rd</sup>  |
| 5    | Shuhan Cheng | Aug 29 <sup>th</sup> | Sep 3 <sup>rd</sup>  |
| 6    | Yurong Zhao  | Aug 29 <sup>th</sup> | Sep 3 <sup>rd</sup>  |

<sup>\*</sup> Start Date, when the researcher leaves her/his Institution.

(\* State the duration of the stay for any member of the delegation; these can be different \*)

#### **Destinations and dates\***

| Num. | Name         | Visited Institution**           | Start Date           | End Date***         |
|------|--------------|---------------------------------|----------------------|---------------------|
| 1    | Wenyong Li   | INRES-Phytomedizin of UB        | Aug 31 <sup>th</sup> | Sep 1 <sup>st</sup> |
|      |              | Land-wirtschaftliche base of UB | Sep 2 <sup>nd</sup>  | Sep 2 <sup>nd</sup> |
| 2    | Zhenfa Li    | INRES-Phytomedizin of UB        | Aug 31 <sup>th</sup> | Sep 1 <sup>st</sup> |
|      |              | Land-wirtschaftliche base of UB | Sep 2 <sup>nd</sup>  | Sep 2 <sup>nd</sup> |
| 3    | Qingyu Xue   | INRES-Phytomedizin of UB        | Aug 31 <sup>th</sup> | Sep 1 <sup>st</sup> |
|      |              | Land-wirtschaftliche base of UB | Sep 2 <sup>nd</sup>  | Sep 2 <sup>nd</sup> |
| 4    | Yan'an Wang  | INRES-Phytomedizin of UB        | Aug 31 <sup>th</sup> | Sep 1 <sup>st</sup> |
|      |              | Land-wirtschaftliche base of UB | Sep 2 <sup>nd</sup>  | Sep 2 <sup>nd</sup> |
| 5    | Shuhan Cheng | INRES-Phytomedizin of UB        | Aug 31 <sup>th</sup> | Sep 1 <sup>st</sup> |
|      |              | Land-wirtschaftliche base of UB | Sep 2 <sup>nd</sup>  | Sep 2 <sup>nd</sup> |
| 6    | Yurong Zhao  | INRES-Phytomedizin of UB        | Aug 31 <sup>th</sup> | Sep 1 <sup>st</sup> |
|      |              | Land-wirtschaftliche base of UB | Sep 2 <sup>nd</sup>  | Sep 2 <sup>nd</sup> |

<sup>\*\*</sup> End Date, when the researcher returns to her/his Institution.



# A Traceability and Early warning system for supply chain of Agricultural Product: complementarities between EU and China

- \* During a full stay, different Institutions can be visited; these different visits are enlisted here; generating different records on the stay's database.
- \*\* Institutions are named by their acronym as detailed in the Annex I.
- \*\*\* When a day includes activities in more than one place, it is selected the place where the most of the time has been used.

(\* The member of a delegation can visit different partners of the counterpart area during a single journey; here you must state the time at every partner; start and end dates of the full period must be considered as limits of the detailed stays \*)

#### 2. Technical visits.

| Institution/Company: INRES-Phytomedizin |                            |  |   |  |  |  |
|---|----------------------------|--|---|--|--|--|
| Date:                                   | Aug, 31 <sup>st</sup> - Se | ep, 1 <sup>st</sup>  | Location:   | Bonn, Germany  |  |  |
| Person/s                                | Person/s of contact:       |  | Prof. Dr. Heinz-W. Dehne                                |  |  |  |
| Delegation                              | on participant             | s:   | Wenyong Li  |  |  |  |
|   |                            |  | Zhenfa Li   |  |  |  |
|   |                            |  | Qingyu Xue  |  |  |  |
|   |                            |  | Yan'an Wang   |  |  |  |
|   |                            |  | Shuhan Cheng  |  |  |  |
|   |                            |  | Yurong Zhao   |  |  |  |
| Short Des                               | Short Description of the   |  |   | A research institute for plant diseases and plant protection |  |  |
| Institutio                              | n/company:                 |  | using information technology.                           |  |  |  |
| Commen                                  | ts about the v             | visit: We visited Plant Medicine Lab of Institute for Crop Science |   |  |  |  |
|   |                            | and Resource Conservation (INRES), to see the equipment            |   |  |  |  |
|   |                            |  | and experiment platform. We studied from Dr. Achim that |  |  |  |
|   |                            | how to find pathogen using microscopy. Also we visited some        |   |  |  |  |
|   |                            | greenhouses in the campus. We don't take any pathogen              |   |  |  |  |
|   | from UB.                   |  |   |  |  |  |







# A Traceability and Early warning system for supply chain of Agricultural Product: complementarities between EU and China

| Institution/Company: Land-w |                                | virtschaftliche base   |   |               |  |  |
|-----------------------------|--------------------------------|--|---|---------------|--|--|
| Date:                       | Sep, 2 <sup>nd</sup>           |  | Location:   | Bonn, Germany |  |  |
| Person/s of contact:        |                                |  | Prof. Dr. Heinz-W. Dehne                                  |               |  |  |
| Delegation                  | on participant                 | s:   | Wenyong Li  |               |  |  |
|                             |                                |  | Zhenfa Li   |               |  |  |
|                             |                                |  | Qingyu Xue  | Qingyu Xue    |  |  |
|                             |                                |  | Yan'an Wang   |               |  |  |
|                             |                                | Shuhan Cheng   |   |               |  |  |
|                             |                                |  | Yurong Zhao   |               |  |  |
| Short Des                   | cription of the                | the A research base for plant phenotyping, crop and fruit tree |   |               |  |  |
| Institutio                  | Institution/company: planting. |  |   |               |  |  |
| Comment                     | ts about the v                 | isit:  | We visited Land-wirtschaftliche base, to see the crop and |               |  |  |
|                             |                                |  | apple tree experiment and phenotyping equipment. We       |               |  |  |
|                             |                                | don't take any pathogen from UB.                               |   |               |  |  |



# 3. Speeches and participation in Workshops/Conferences/Courses.

| Title of the presentation: SDA              |                          | AU Introduction  |   |       |  |
|---|--------------------------|--|---|-------|--|
| Speaker: Ya                                 |                          | Yan  | n'an Wang   |       |  |
| Organization:* IN                           |                          | INR  | RES-Phytomedizin                                      |       |  |
| <b>Date:</b> August, 31 <sup>th</sup> ,2015 |                          | Location:  | UB  |       |  |
| Person/s                                    | Person/s of contact: Pro |  | f. Dr. Heinz-W.                                       | Dehne |  |
| Short sun                                   | Short summary of the     |  | Prof. Wang introduced the basic data of SDAU, such as |       |  |
| presentation:                               |                          | Location & History, Faculty & Discipline Construction, Faculty |   |       |  |
|   |                          | & Discipline Construction and Cooperation Intentions           |   |       |  |
| Public:                                     |                          | Restricted to the INRES researchers.                           |   |       |  |

| Title of the presentation:               |  | Identification of Orchard pests Based on Machine Vision |  |          |  |
|--|--|---|--|----------|--|
| Speaker:                                 |  | Wenyong Li  |  |          |  |
| Organization:*                           |  | INRES   |  |          |  |
| <b>Date:</b> Sep, 11 <sup>th</sup> ,2015 |  |   | Location:  | UB-INRES |  |
| Person/s of contact:                     |  | Ma  | Marlene  |          |  |
| Short summary of the presentation:       |  |   | We exchanged our latest research ideas and results and discussed the data processing and model establishment methods. Introduce the segmentation and identification algorithm for orchard pests based on machine vision. |          |  |
| Public:                                  |  | Restricted to the INRES researchers.                    |  |          |  |

<sup>\*</sup> Indicate the Institution where the talk has been given, and in the case of formal workshops or Congress its name.

# A Traceability and Early warning system for supply chain of Agricultural Product: complementarities between EU and China

(\* Fulfill a specific table for every talk developed under the framework of the stay \*)

# 4. Summary of the exchange and research developed.

(\* Free text describing in a short way the exchange/research tasks developed during the stay, indicate if any research result or collaboration statement has been obtained from the visit \*)

Main results of these stays have been:

a/ Dr. Wenyong Li joined Dr. Ali in his experiment for wheat kernel quality evaluation. Also, I visited the hyperspectral imaging platform in local greenhouse, and learned some white balance correction method before acquiring the hyperspectral images. Analysis of experiment steps for wheat plant and how to design, control different weather in greenhouse. Learned lessons and discussion about how experiences can be exchanged by both areas (EU and China). (Main researcher: Dr. Wenyong Li).

b/ Discussion of image process method in different application. The objective of this discussion was learning the technology of hyperspectral image processing developed by the group INRES, and its possible application to the insect identification. It is under evaluation the feasibility of ENVI Classic and APS ASSESS software application into plant diseases and insect identification. (Main researchers: Dr. Wenyong Li).

During all the days in Bonn, we had not taken any pathogen from any institute or person.