

行政院農業委員會  
資料開放平台

**農業試驗所機構典藏  
API 介接說明書**

文件編號：COAOPD-API-EIR115

版本：1.0

發行日期：2015/12/18

## 修訂表

版本	變更日期	修改摘要
1.0	2015/12/18	首次發行。

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## 1. 資料說明

### (1) 基本資料描述

本文件為「農業試驗所機構典藏」介接使用說明。資料提供單位為農業試驗所。

### (2) 資料內容描述

提供資料包括：head identifier、上傳日期、setSpec、貢獻者、作者、日期、資源識別代號、語言、關聯、題名、關鍵詞、資料格式、資源類型、網址、摘要等欄位資料。

### (3) 更新頻率

每天。

### (4) 介接格式

輸出格式提供 XML、JSON、CSV 格式。若無資料，則傳回空值 []。本文件中輸出 JSON 格式值，皆為範例參考，並非實際資料，變數名稱順序亦非實際資料順序。

### (5) 授權方式

本資料適用國發會授權條款。

## 2. 介接說明

### (1) 資料清單

#### ■ 基本定義

A. 「農業試驗所機構典藏」資訊序號定義為「EIR115」

B. Resource Path：

<http://data.coa.gov.tw/Service/OpenData/IrtariOaidc.aspx>

C. 單次查詢，最多回傳所有資料。

#### ■ 規格定義

A. 輸出資料標籤說明：

編號	標籤名稱	標籤說明
01	headidentifier	headidentifier
02	headdatestamp	上傳時間
03	headsetSpec	setSpec
04	metacontributor	貢獻者
05	metacreator	作者
06	metadate	日期
07	metaidentifier	資源識別代號
08	metalanguage	語言
09	metarelation	關聯
10	metatitle	題名
11	metasubject	關鍵詞
12	metaformat	資料格式
13	metatype	資源類型
14	metaidentifierurifulltext	網址
15	metadescription	摘要

備註：相關欄位標籤可參考都柏林核心集（Dublin Core）

## B. JSON Output 範例：

## JSON 格式

```
[ { "headidentifier":"oai:localhost:345210000/98","headdatestamp":"2015-11-06T05:24:28Z","headsetSpec":"hdl_345210000_3275,hdl_345210000_5,hdl_345210000_25,hdl_345210000_48,hdl_345210000_6122","metacontributor":"技術服務組","metacreator":"許秀惠; 林俊義; 黃毓斌; 方尚仁; 安寶貞,Hseu, S. H.; Lin, C. Y.; Huang Y. B.; Fang, S. L.; Ann, P. J.", "metadate":"2001-06,[[accessioned]]2010-04-28T03:17:37Z,[[available]]2010-04-28T03:17:37Z,[[issued]]2010-04-28T03:17:37Z","metaidentifier":"[[uri]]http://210.69.150.18:8080/handle/345210000/98","metalangage":"zh_TW,[[iso]]en_US", "metarelation":"植物保護學會會刊 43(2): 105-115,Plant Protection Bulletin 43(2): 105-115","metatitle":"橫山梨果腐病之病因及病原菌藥劑感受性測定,Fruit rot of oriental pear caused by Erwinia carotovora subsp. carotovora and in vitro bactericide screening","metasubject":"梨; 果腐病; 軟腐細菌; 藥劑篩選; 果實蠅,pear; fruit rot disease; soft rot bacterium; bactericide screening; oriental fruit fly","metaformat":"[[extent]]102 bytes,[[mimetype]]text/html","metatype":"article,article,article,article,article,article","metaidentifierurifulltext":"","metadescription":"[[abstract]]於1998年6月間在南投縣中寮鄉種植之橫山梨發現果實腐爛問題，經柯霍氏法則確認該病原為細菌，隔年(1999)於新竹栽培之橫山梨亦發現相同病害。此病害主要危害果實，在枝條及葉片上不引起病徵，果實初期病徵僅在表皮上出現淡褐色水浸狀小斑點，病斑繼續擴展造成內部果肉腐爛，輕壓表皮具彈性，嚴重時整個果實腐爛，並有乳白色汁液與氣泡湧出。從罹病果實上分離之細菌，經生理生化測定，Biolog 鑑定系統，專一性引子對PCR分析等方法，鑑定該病原細菌為 Erwinia carotovora subsp. carotovora。將此病定名為果腐病。以蟲針沾細菌懸浮液刺傷果實及浸菌無傷口接種等方法接種橫山梨果實，發現僅傷口處理者出現病徵，且病徵擴展迅速，病斑直徑可達 1.2 cm/day，該病菌也感染新興梨，在馬鈴薯、胡蘿蔔及洋蔥等組織上具有致腐能力，且可造成煙草植株腐爛。果實蠅媒介試驗顯示在有果實蠅成蟲之蟲箱內，不論以病菌處理果實蠅取食之洋菜膠或以病菌直接覆於果實上，供試之橫山梨及新興梨果實均出現典型果腐病徵。另外，讓果實蠅於梨果實上產卵後，於產卵孔滴病原菌也產生相同果腐病徵。測試市售 11 種藥劑在一般使用濃度下對該病菌生長之抑制效果，結果顯示除鋅乃浦外，其餘供試之枯萎寧、四環黴素、鏈黴素、安達菌、嘉賜黴素、嘉賜銅、氫
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氧化銅、鹼性氯氧化銅、銅合浦及鋅錳乃浦等藥劑於培養基上均能抑制該病菌之生長。An incidental fruit rot of oriental pears occurred in Chung Liao, Nantou in July, 1998. The causal agent attacked fruits and caused severe fruit rot. After being attacked, fruits firstly showed water-soaked lesions, the tissues became extremely soft, followed by a slimy decay that associated with mushy slimy white color ooze emerging from lesions. An unknown bacterium was isolated from the diseased fruits and followed identification based on physiological characteristics, Biolog analyses and primer pairs specific to *Erwinia carotovora* and *Erwinia chrysanthemi* using polymerase chain reaction, the causal agent was therefore identified as *Erwinia carotovora* subsp. *carotovora* (Ecc). Inoculation tests conducted in the laboratory indicated that the expansion of the soft lesion could reach up to 1.2 cm diameter per day. In addition to pear, the bacterium could also cause soft rot of potato, carrot, onion and tobacco. Transmission tests combining oriental fruit flies and Ecc in a confined space indicated that oriental fruit flies could transmit the disease through feeding or egg laying. Screening eleven chemicals include Streptomycin + Tetracycline, Tetracycline, Streptomycin, Thiophanate methyl + Streptomycin, Kasugamycin, Kasugamycin + Copper oxychloride, Copper hydroxide, Copper oxychloride, Copper oxychloride + Mancozeb, and Mancozeb in vitro, the results showed that all chemicals, except Zineb, effectively inhibited bacterial growth at various dosage tested." } ]

## (2) 進階查詢

### ■ 規格定義

- A. [http://data.coa.gov.tw/Service/OpenData/IrtariOaidc.aspx?top={top}&\\$skip={skip}&\\$filter={filter}](http://data.coa.gov.tw/Service/OpenData/IrtariOaidc.aspx?top={top}&$skip={skip}&$filter={filter})
- B. 輸入的參數名稱不必都出現。
- C. 輸入的參數名稱說明與輸出範例如下。

### ■ Input

項次	參數名稱	說明	備註
1	top	取最前筆數	如：將{top} 代換成 20
2	skip	跳過筆數	如：將{skip} 代換成 100
3	filter	篩選條件， 運算式類別	如：將{filter} 代換成橫山梨、果腐病 (1) = metatitle+like+橫山梨

		如下表。	(2) = metatitle+like+橫山梨+{運算式}+metasubject+like+果腐病 ※網址中的中文部分需要用 URLEncode 轉換成 UTF-8
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運算式類別	運算式	網址顯示	中文顯示 邏輯運算子
邏輯運算子	AND	and	而且
邏輯運算子	OR	or	或是

### ■ Output

JSON 格式
[ { "headidentifier":"oai:localhost:345210000/98","headdatestamp":"2015-11-06T05:24:28Z","headsetSpec":"hdl_345210000_3275,hdl_345210000_5,hdl_345210000_25,hdl_345210000_48,hdl_345210000_6122","metacontributor":"技術服務組","metacreator":"許秀惠; 林俊義; 黃毓斌; 方尚仁; 安寶貞,Hseu, S. H.; Lin, C. Y.; Huang Y. B.; Fang, S. L.; Ann, P. J.", "metadate":"2001-06,[ [accessioned]]2010-04-28T03:17:37Z,[ [available]]2010-04-28T03:17:37Z,[ [issued]]2010-04-28T03:17:37Z","metaidentifier":"[[uri]]http://210.69.150.18:8080/handle/345210000/98","metalanguage":"zh_TW,[ [iso]]en_US", "metarelation":"植物保護學會會刊 43(2): 105-115,Plant Protection Bulletin 43(2): 105-115","metatitle":"橫山梨果腐病之病因及病原菌藥劑感受性測定,Fruit rot of oriental pear caused by Erwinia carotovora subsp. carotovora and in vitro bactericide screening","metasubject":"梨; 果腐病; 軟腐細菌; 藥劑篩選; 果實蠅,pear; fruit rot disease; soft rot bacterium; bactericide screening; oriental fruit fly","metaformat":"[[extent]]102 bytes,[ [mimetype]]text/html","metatype":"article,article,article,article,article,article","metaidentifierurifulltext":"","metadescription":"[[abstract]]於1998年6月間在南投縣中寮鄉種植之橫山梨發現果實腐爛問題,經柯霍氏法則確認該病原為細菌,隔年(1999)於新竹栽培之橫山梨亦發現相同病害。此病害主要危害果實,在枝條及葉片上不引起病徵,果實初期病徵僅在表皮上出現淡褐色水浸狀小斑點,病斑繼續擴展造成內部果肉腐爛,輕壓表皮具彈性,嚴重時整個果實腐爛,並有乳白色汁液與氣泡湧出。從罹病果實上分離之細菌,經生理生化測定,Biolog 鑑定系統,專一性引子對PCR分析等方法,鑑定該病原細菌為 Erwinia carotovora subsp. carotovora。將此病定名為果腐病。以蟲針沾細菌懸浮液刺傷



果實及浸菌無傷口接種等方法接種橫山梨果實，發現僅傷口處理者出現病徵，且病徵擴展迅速，病斑直徑可達 1.2 cm/day，該病菌也感染新興梨，在馬鈴薯、胡蘿蔔及洋蔥等組織上具有致腐能力，且可造成煙草植株腐爛。果實蠅媒介試驗顯示在有果實蠅成蟲之蟲箱內，不論以病菌處理果實蠅取食之洋菜膠或以病菌直接覆於果實上，供試之橫山梨及新興梨果實均出現典型果腐病徵。另外，讓果實蠅於梨果實上產卵後，於產卵孔滴病原菌也產生相同果腐病徵。測試市售 11 種藥劑在一般使用濃度下對該病菌生長之抑制效果，結果顯示除鋅乃浦外，其餘供試之枯菱寧、四環黴素、鏈黴素、安達菌、嘉賜黴素、嘉賜銅、氫氧化銅、鹼性氯氧化銅、銅合浦及鋅錳乃浦等藥劑於培養基上均能抑制該病菌之生長。An incidental fruit rot of oriental pears occurred in Chung Liao, Nantou in July, 1998. The causal agent attacked fruits and caused severe fruit rot. After being attacked, fruits firstly showed water-soaked lesions, the tissues became extremely soft, followed by a slimy decay that associated with mushy slimy white color ooze emerging from lesions. An unknown bacterium was isolated from the diseased fruits and followed identification based on physiological characteristics, Biolog analyses and primer pairs specific to *Erwinia carotovora* and *Erwinia chrysanthemi* using polymerase chain reaction, the causal agent was therefore identified as *Erwinia carotovora* subsp. *carotovora* (Ecc). Inoculation tests conducted in the laboratory indicated that the expansion of the soft lesion could reach up to 1.2 cm diameter per day. In addition to pear, the bacterium could also cause soft rot of potato, carrot, onion and tobacco. Transmission tests combining oriental fruit flies and Ecc in a confined space indicated that oriental fruit flies could transmit the disease through feeding or egg laying. Screening eleven chemicals include Streptomycin + Tetracycline, Tetracycline, Streptomycin, Thiophanate methyl + Streptomycin, Kasugamycin, Kasugamycin + Copper oxychloride, Copper hydroxide, Copper oxychloride, Copper oxychloride + Mancozeb, and Mancozeb in vitro, the results showed that all chemicals, except Zineb, effectively inhibited bacterial growth at various dosage tested." } ]