

建築署

通知移除位於香港公園被確診感染褐根病的 古樹名木編號 ArchSD CW/41 (斜坡編號 11SW-B/FR260) 及 ArchSD CW/43 (斜坡編號 11SW-B/FR152)

本署於二零一七年七月十三日出席了中西區區議會轄下食物環境衛生及工務委員會 (以下簡稱委員會) 第十次會議，並向與會人士就上述事宜作出講解，及解答議員的提問。

2. 其後，本署應委員會的要求邀請到發展局城市林務諮詢小組樹木專家 Kevin ECKERT 先生，聯同委員會委員、發展局轄下綠化、園境及樹木管理組、康樂及文化事務署、以及環保觸覺的代表於二零一七年七月二十一日進行實地視察。於實地視察中，樹木專家視察了古樹名木編號 ArchSD CW/41 (斜坡編號 11SW-B/FR260) 及 ArchSD CW/43 (斜坡編號 11SW-B/FR152)，並向在場的委員會委員解釋為避免傳染同址的其他樹木，建議移除上述兩棵被確診感染褐根病的古樹名木。在考慮樹木專家的意見後，本署計劃於二零一七年八月底展開移除樹木的工程，並就此徵詢委員意見。

3. 樹木專家 Kevin ECKERT 先生的觀點及建議撮要於下文第 4 至 7 段，如欲了解詳細內容，請參閱附件英文原版。

褐根病的散播

4. 褐根病目前未有已知及有效的治療方法。其他地方的個案亦顯示受感染樹木未有方法治癒。雖然有關的研究及試驗正在進行，但仍未有成功的例子。

5. 褐根病基本上是一種附於泥土的病菌，它的傳播途徑主要透過樹根之間的接觸、受感染泥土的移動、移植受感染的植物，或泥土中帶菌的碎屑。其他因素如雀鳥、昆蟲或周邊的人類活動都可能助長褐根病的散播。因此，如樹木一旦被確認感染褐根病，需儘快被隔離及移除。

處理感染褐根病的古樹名木之建議

6. 當古樹名木被確認感染褐根病後，應在真菌子實體出現前被隔離及移除。

如菌絲在樹幹底部或根部出現，意味著感染已發展至嚴重階段，沒有方法治癒。鄰近樹木需進行密切監察，一旦發現感染褐根病，需即時處理以防止病菌擴散。

7. 至於上述古樹名木編號 ArchSD CW/41 及 ArchSD CW/43，雖然並無即時倒塌風險，但最近在樹幹底部及根部表面增長的菌絲顯示褐根病已進一步擴散。倘上述樹木保留於公園內，過往眾多的經驗顯示褐根病會透過樹根之間的接觸、孢子散播或其他途徑傳播至公園內其他古樹名木及樹木。因此，上述兩棵古樹名木應立即被隔離，其樹身、樹樁及整個根部亦需儘快被移除以防止褐根病擴散。此外，該兩棵樹附近的樹木亦應受監察(包括其根部範圍可接觸的樹木)。

8. 請委員察悉本文件內容，並提供意見。如委員於二零一七年八月十六日(星期三)或以前不就上述移樹建議作出反對，按上述獨立樹木專家意見及如在現場環境的講解，本署將安排承辦商於二零一七年八月底移除上述兩棵古樹名木，並按專家建議的措施進行移除樹木後的跟進工作(包括移除受感染範圍的樹根及更換泥土)。相關部門亦繼續及加強監察鄰近樹木及加強預防工作。估計前期移除樹身工作需時十個工作天，由於工作期間需封閉旁邊行人道，星期六及日會暫停工作以減少對公園遊人造成不便。為配合前述工程，康文署會於公園內張貼告示，通知市民可利用其他路線前往公園內各設施。

建築署

二零一七年八月

附件

(一) 城市林務諮詢小組實地視察報告

Urban Forestry Advisory Panel (UFAP) Site Meeting Report

- Date of inspection: 21 July 2017
- Time: 4:30pm – 5:30pm
- Inspected OVTs: ARCHSD CW/41 and ARCHSD CW/43
- Venue: Hong Kong Park
- Attendees:

UFAP member – Mr Kevin ECKERT

GLTMS – Florence Tsui (H/TMO (Atg)), Leo Tai (TMO7)

ArchSD – Yang Ka Yee (SForO/TMG), Chris Chui Chi Keung (LA/TMG)

LCSD – Clara Siu Tak Yee (Mgr/HK Park), Eileen Tang (SAA(OF)HKP)

C&W DC – Yeung Hok Ming, Hui Chi Fung, Assistant to Chan Chit Kwai, Annie Man Sum Yi

Green Sense – Mark Mak

Summary of Discussion

Mr. ECKERT's views on the spreading of Brown Root Rot (BRR) disease and his advice on handling of BRR disease infected trees are summarized below.

Spreading of Brown Root Rot Disease

BRR disease has no known and effective cure at this time. In many BRR disease investigation cases in Taiwan, Malaysia and various Islands within the Pacific Rim, no tree could be cured from the disease. Studies and trials including various fungicide, Trichoderma and other innovative applications, including traditional folk treatments were being undertaken with no successful case so far. Once the tree has been confirmed with BRR disease, it needs to be isolated and removed as soon as possible.

BRR disease is primarily a soil borne disease, which appears to be primarily spread through root-to-root contact, movement through soil, movement of infected soil, transplant of infected plants or by infected wood debris in soil. Other vectors like birds, insects or surrounding human activities may also help spreading the BRR disease. The spores from fungal fruiting bodies can also be dispersed by routes such as soil movement and flow of water and wind.

Handling of BRR Disease Infected OVTs

In the case of OVT LCSD YTM/97 in Kowloon Park, the retention of this BRRD infected tree resulted in the infection and death of OVT YTM/96 and loss of all other trees nearby. If an OVT is confirmed with BRR disease infection, it should be immediately isolated by physical and/or chemical barriers for containment and removed

before fruiting bodies are formed. For trees identified with likely BRR disease, they should be immediately isolated by physical and/or chemical barriers for containment and tested to confirm BRRD. When obvious signs of BRR disease are observed on any tree, such as mycelial crust on the lower trunk or roots, it means that the fungal infection has already been developed to an advanced stage and the tree must be isolated and removed immediately. Treatment will not cure the infection. All trees near to infected trees should be monitored closely and then managed immediately if BRRD is detected to avoid the spreading of disease.

For OVT ARCHSD CW/41 and CW/43, although the two trees pose no imminent danger of failure at this moment, advanced disease spread was noted with the recent outbreak of mycelial crust in the surface root systems and lower trunk. If these two OVTs remain in the park, extensive experience has shown that the disease will spread to other OVTs and trees inside the park by root-to-root contact, transfer of spores or other vectors. The root systems of these two OVTs should be isolated immediately and these trees, their stumps and all significant roots removed as soon as possible to prevent the spreading of the BRR disease. Because these trees have been left for this period of time after identification of this infection, BRR disease may have already advanced beyond this planting area. Monitoring of all nearby trees should be conducted. Nearby trees should include all trees within the root zone of these trees (approximately 4X the radius of the tree crown) and downslope within the likely zone of surface soil movement. For the treatment of soil left on contaminated site, the most effective and potentially fastest method would be replacement of contaminated soil with clean soil. If soil replacement is not feasible, flooding of the soil with water for a one month period has shown success in other areas. A number of other techniques, including soil treatment with urea (which causes an unpleasant odor) and removal of all roots in the soil followed by treatment with *Trichoderma* followed by periodic testing for *P. noxious* until it is gone, should be considered to eliminate the disease pathogen left on site.

End