

CONVENCIÓN SOBRE EL COMERCIO INTERNACIONAL DE ESPECIES  
AMENAZADAS DE FAUNA Y FLORA SILVESTRES



Vigésima primera reunión del Comité de Flora  
Veracruz (México), 2-8 de mayo de 2014

Interpretación y aplicación de la Convención

Cumplimiento y observancia

PRESENTACIÓN DE INFORMES SOBRE EL COMERCIO DE PLANTAS  
REPRODUCIDAS ARTIFICIALMENTE

1. Este documento ha sido preparado por la Secretaría.

Antecedentes

2. En su 16ª reunión (CoP16, Bangkok, 2013), la Conferencia de las Partes adoptó las siguientes revisiones de las Decisiones:

***Dirigidas a la Secretaría***

14.39      *Sujeto a la disponibilidad de fondos, la Secretaría, en consulta con el PNUMA Centro de Monitoreo de la Conservación Mundial deberá:*

- (Rev. CoP16)
- a) *realizar un estudio de las prácticas de las Partes en materia de presentación de informes sobre el comercio de plantas reproducidas artificialmente de taxa incluidos en el Apéndice II en relación, p. ej., con el grado de exhaustividad y detalle;*
  - b) *identificar casos en los que la compilación de datos sobre el comercio de plantas reproducidas artificialmente de taxa incluidos en el Apéndice II haya contribuido en cierta medida a la detección del comercio ilegal o a cualquier otro análisis relacionado con la conservación de la flora silvestre;*
  - c) *teniendo en cuenta los resultados de los párrafos a) y b) supra, analizar el texto de la Convención y las resoluciones a fin de determinar los elementos vinculantes y no vinculantes en materia de presentación de informes, con especial interés en las plantas reproducidas artificialmente de taxa incluidos en el Apéndice II. La Secretaría deberá elaborar una lista de opciones para simplificar esa presentación de informes; y*
  - d) *comunicar sus conclusiones al Comité de Flora antes de su 21ª reunión.*

### ***Dirigidas al Comité de Flora***

14.40 *El Comité de Flora, tras considerar el informe de la Secretaría, deberá:*

(Rev. CoP16)

- a) *determinar si hay algunas plantas reproducidas artificialmente de taxa del Apéndice II para las que la presentación detallada de informes es menos valiosa; y*
- b) *comunicar sus resultados al Comité Permanente en su 65ª reunión.*

### ***Dirigida al Comité Permanente***

14.41 *El Comité Permanente deberá:*

(Rev. CoP16)

- a) *teniendo en cuenta los resultados del Comité de Flora, determinar si es posible simplificar la presentación de informes sobre el comercio de plantas reproducidas artificialmente del Apéndice II; y*
- b) *comunicar sus resultados a la Conferencia de las Partes en su 17ª reunión y presentar proyectos de enmienda de las resoluciones correspondientes, según proceda.*

3. El texto original en que se basaban las Decisiones anteriores fue adoptado por la Conferencia de las Partes en su 14ª reunión (La Haya, 2007) y revisado posteriormente durante la CoP15 (Doha, 2010), y la CoP16. Los fondos necesarios para la realización del estudio previsto en la Decisión 14.39 (Rev. CoP15), párrafo a), se obtuvieron en febrero de 2012 gracias a la generosa contribución de la Autoridad Administrativa CITES de Suiza.
4. La Secretaría contrató al Centro de Monitoreo de la Conservación Mundial del PNUMA (PNUMA-CMCM) para que realizara el estudio antes referido y para que proporcionara información en respuesta a las interrogantes formuladas en los párrafos b) y c) de la Decisión. El PNUMA-CMCM comenzó a recopilar la información en la 20ª reunión del Comité de Flora (PC20, Dublín, marzo de 2012), y solicitó informaciones adicionales a través de un cuestionario distribuido con la Notificación a las Partes No. 2012/032 del 28 de marzo de 2012. Tras los exámenes y revisiones, el informe sobre el estudio fue concluido en septiembre de 2013.
5. En el Anexo 1 del presente documento se presenta un resumen ejecutivo de dicho informe. En el Anexo 2 figura una serie de opciones propuestas por el PNUMA-CMCM que podrán ser consideradas de conformidad con el párrafo c) de la Decisión. En el Anexo 3 se adjunta una copia integral del informe, únicamente en inglés (idioma en el que éste fue preparado).

### **Prácticas de las Partes**

6. El informe del PNUMA-CMCM que se adjunta incluye un resumen de las prácticas de las Partes al presentar los informes sobre el comercio de plantas reproducidas artificialmente de especies incluidas en el Apéndice II. La Secretaría desea recalcar los siguientes elementos en particular:
  - a) Existen variaciones considerables entre las prácticas seguidas por las Partes con relación a los niveles taxonómicos utilizados en la presentación de informes. En cierto número de casos, las Partes no presentan sus informes utilizando el nivel recomendado por las *Directrices para la preparación y presentación de los informes anuales CITES*, siguiendo lo instado por la Conferencia de las Partes en la Resolución Conf.11.17 (Rev. CoP16). Al menos un país ha reducido significativamente la carga de presentación de informes utilizando para ellos el nivel en el que las especies han sido incluidas en los Apéndices;
  - b) Algunas partes no presentan informes sobre el comercio autorizado con certificados fitosanitarios de conformidad con la Resolución Conf. 12.3 (Rev. CoP16), sobre *Permisos y certificados*, sección VII, *En lo que respecta a los certificados fitosanitarios*;

- c) Por lo demás, las prácticas en cuanto presentación de informes seguidas por las Partes parecen ser congruentes en términos generales con las *Directrices para la preparación y presentación de los informes anuales CITES*.
7. Sin embargo, cabe señalar que debido a restricciones presupuestarias, el contrato de la Secretaría con el PNUMA-CMCM no exige la inclusión en la Base de datos sobre el comercio CITES de datos sobre el comercio de plantas reproducidas artificialmente de taxa incluidos en el Apéndice II si éstos no han sido comunicados en versión electrónica. Por consiguiente, el examen de dichos datos en la Base de datos sobre el comercio no proporciona una imagen completa de la situación.

#### Contribución a la detección del comercio ilegal o a otros análisis relacionados con la conservación de la flora silvestre

8. El informe del PNUMA-CMCM contiene un resumen y análisis útil de la información sobre los decomisos de plantas reproducidas artificialmente incluidas en los informes anuales y bienales de las Partes y muestra que existe un cuerpo bibliográfico considerable en el que se registra el comercio ilegal de plantas, particularmente en los casos en los que no existía un permiso de exportación CITES o en los que se declararon plantas silvestres como plantas reproducidas artificialmente. Sin embargo, no queda claro si la información sobre el comercio ilegal recogida en estos estudios procede del examen de los datos sobre el comercio.
9. El informe del PNUMA-CMCM no incluye información directa sobre el uso de los datos de los informes anuales como base para detectar el comercio ilegal o para otros análisis relacionados con la conservación de la flora. Además, la Secretaría no dispone de ninguna información sobre el uso de los datos comerciales para dichos propósitos.
10. En la Resolución Conf. 11.11 (Rev. CoP15) sobre *Reglamentación del comercio de plantas*, la Conferencia de las Partes recomienda que los órganos de aplicación utilicen los informes anuales y otras fuentes de información para detectar posibles casos de comercio ilícito. Sin embargo, tomando en cuenta que la mayoría de los informes anuales se comunican 6 a 10 meses después del período que cubren, no sería sorprendente constatar que los informes anuales no se utilizan en gran medida con esta finalidad. Lo cual implica que los datos comunicados en cada informe podrían referirse a envíos que han tenido lugar entre 6 y 22 meses antes. Sin embargo, si se estuvieran examinando los datos comerciales por cualquier razón y se observaran indicaciones que apunten a la existencia de comercio ilegal, estos datos deberían ser transmitidos a las Autoridades Administrativas adecuadas para más investigaciones.

#### Elementos vinculantes y no vinculantes en materia de presentación de informes

11. La única obligación vinculante de las Partes con relación a la presentación de un informe anual que incluya datos sobre el comercio figura en el párrafo 7(a) del Artículo VIII de la Convención, en el que se estipula que cada Parte deberá transmitir a la Secretaría:
- a) *un informe anual que contenga un resumen de la información prevista en el subpárrafo b) del párrafo 6 del presente Artículo; y*

Además, el párrafo 6(b) del Artículo VIII especifica lo siguiente:

- b) *el número y la naturaleza de los permisos y certificados emitidos; los Estados con los cuales se realizó dicho comercio; las cantidades y los tipos de especímenes, los nombres de las especies incluidas en los Apéndices I, II, y III y, cuando sea apropiado, el tamaño y sexo de los especímenes.*
12. Las recomendaciones no vinculantes de la Conferencia de las Partes figuran en las Resoluciones que la Conferencia ha adoptado. Tres de dichas Resoluciones son particularmente pertinentes:
- a) La Resolución Conf. 11.17 (Rev. CoP16) sobre *Informes nacionales*:

En esta Resolución, la Conferencia de las Partes insta a las Partes a que presenten sus informes anuales de conformidad con las *Directrices para la preparación y presentación de los informes anuales CITES*. La versión más reciente de estas Directrices fue distribuida con la Notificación a las Partes No. 2011/019 del 17 de febrero de 2011 y se encuentra disponible en: <http://www.cites.org/esp/notif/2011/S019A.pdf>.

Las propias Directrices precisan en la sección sobre "Instrucciones específicas", que:

*En lo que respecta a las plantas, las Partes deberían:*

- i) hacer todo lo posible por informar sobre el comercio de plantas incluidas en la CITES a nivel de especie o, si esto es imposible para los taxa incluidos en los Apéndices por familia, a nivel de género; sin embargo, los híbridos de orquídeas del Apéndice II reproducidos artificialmente podrán considerarse como tales;*
- ii) distinguir en sus informes anuales entre los especímenes vegetales de origen silvestre y los reproducidos artificialmente...*

- b) La Resolución Conf. 11.11 (Rev. CoP15) sobre *Reglamentación del comercio de plantas*:

En su preámbulo, la Conferencia de las Partes observa:

*que algunas Partes que autorizan la exportación de grandes cantidades de plantas reproducidas artificialmente han de buscar el modo de reducir los trámites administrativos, manteniendo al mismo tiempo la protección de las plantas silvestres y ayudar a los exportadores de plantas reproducidas artificialmente a comprender y acatar la Convención.*

- c) La Resolución Conf. 12.3 (Rev. CoP16)

En la sección VII de esta Resolución, "*En lo que respecta a los certificados fitosanitarios*", la Conferencia de las Partes:

*RECOMIENDA que:*

- a) toda Parte que haya examinado las prácticas que rigen la expedición de sus certificados fitosanitarios para exportar especímenes de especies del Apéndice II reproducidos artificialmente, y haya determinado que dichas prácticas permiten garantizar que los especímenes han sido reproducidos artificialmente [según se define en la Resolución Conf. 11.11 (Rev. CoP15)], pueda considerar dichos documentos como certificados de reproducción artificial, en consonancia con el párrafo 5 del Artículo VII. Tales certificados deben indicar el nombre científico de las especies y el tipo y el número de especímenes y llevar un sello o su equivalente electrónico u otra indicación pertinente que atestigüe que se trata de especímenes reproducidos artificialmente conforme a lo prescrito por la CITES;*
- b) toda Parte que utilice certificados fitosanitarios como certificados de reproducción artificial, informe de ello a la Secretaría y facilite copias de los certificados, sellos, etc. utilizados; y*
- c) los certificados fitosanitarios se utilicen exclusivamente con fines de exportación del país en que se hayan reproducido artificialmente las especies concernidas.*

Ello implica que cuando se utilicen certificados fitosanitarios para autorizar la exportación de plantas reproducidas artificialmente de especies incluidas en el Apéndice II, los datos sobre dicho comercio deberán ser incluidos en el informe anual.

Opciones para racionalizar la presentación de informes:

13. Al considerar la posibilidad de racionalizar la presentación de informes sobre el comercio de plantas reproducidas artificialmente de especies incluidas en el Apéndice II, se deberá tener en cuenta una serie de factores:

- a) Existe la obligación de presentar un informe que incluya, como mínimo, la información indicada en el párrafo 11 anterior;
- b) La carga de presentación de informes que recae en las Partes es considerable y se deberán hacer todos los esfuerzos posibles para mantenerla en un nivel mínimo;

- c) La elaboración automatizada (o semiautomatizada) de informes anuales a partir del sistema de emisión electrónica de permisos debería reducir significativamente la carga que representa la preparación de dichos informes;
  - d) Los datos sobre el comercio incluidos en los informes anuales pueden ser útiles para la supervisión de la aplicación de la Convención, en particular para identificar tendencias en los volúmenes y patrones del comercio y para proporcionar posibles indicadores de niveles significativos de comercio o de comercio ilegal;
  - e) El comercio de especímenes reproducidos artificialmente genuinos, tal como se definen en la Resolución Conf. 11.11 (Rev. CoP15), debería ser de menor preocupación que el comercio de especímenes extraídos del medio silvestre pues su repercusión en la conservación de las especies es menor. Sin embargo, si se reduce el nivel de detalles en la presentación de informes sobre el comercio de especímenes reproducidos artificialmente, es preciso garantizar que no haya una repercusión negativa en el control del comercio de plantas extraídas del medio silvestre.
14. En el Anexo 2 del presente documento figuran cuatro opciones identificadas por el PNUMA-CMCM para reducir la carga de presentación de informes sobre el comercio de plantas reproducidas artificialmente de especies incluidas en el Apéndice II.
15. La Secretaría considera que, de las opciones presentadas en el Anexo 2, la opción 1 es la que proporcionaría la solución más completa para reducir la carga de presentación de informes que recae en las Partes. Siguiendo este método, se presentaría un informe sobre el comercio de plantas reproducidas artificialmente de especies incluidas en el Apéndice II utilizando el mismo nivel taxonómico con el que fueron incluidas en los Apéndices de la CITES. Si se adoptara esta opción, la presentación de informes sobre especímenes reproducidos artificialmente de especies de cactus incluidas en el Apéndice II, por ejemplo, se resumiría bajo la categoría *Cactaceae spp.*, pues este taxón superior está incluido en el Apéndice II pero ello no implica que los nombres utilizados en los permisos y certificados correspondan al del nivel taxonómico superior.
16. El Comité Permanente estableció un Grupo de Trabajo sobre requisitos especiales para la presentación de informes en el que se están considerando todas las obligaciones de las Partes en cuanto a presentación de informes, así como las recomendaciones de presentación de informes incluidas en las Resoluciones y Decisiones de la Conferencia de las Partes. El Grupo de Trabajo informará al Comité de Flora en la presente reunión y presentará su informe a la 65ª reunión del Comité Permanente. La Secretaría considera que sería conveniente que este Grupo de Trabajo (en el cual participa el PNUMA-CMCM) considere y seleccione opciones viables para racionalizar la presentación de informes sobre el comercio de plantas reproducidas artificialmente de especies incluidas en el Apéndice II y en este proceso debería tomar en cuenta los elementos contenidos en el presente documento, incluido el informe integral del PNUMA-CMCM que figura en el Anexo 3.

#### Recomendaciones

17. Habida cuenta de que existe un grupo de trabajo que está examinando de manera global las obligaciones en cuanto a presentación de informes que deben cumplir las Partes, con el objetivo de racionalizarlas, la Secretaría recomienda que el Comité de Flora acuerde lo siguiente:

El Comité de Flora recomienda que el Comité Permanente enmiende el mandato del Grupo de trabajo sobre requisitos especiales para la presentación de informes de manera que incluya la consideración de si la presentación de informes sobre el comercio de plantas reproducidas artificialmente de especies incluidas en el Apéndice II puede ser racionalizada y, si la respuesta es positiva, de qué manera. Para ello deberá tomar en cuenta el contenido del documento PC21 Doc. 16.

18. De conformidad con la Decisión 14.40 (Rev. CoP16), el Comité de Flora deberá considerar si existe cualquier taxa de plantas incluidas en el Apéndice II para las que un informe detallado del comercio de especímenes reproducidos artificialmente "es menos valiosa" y comunicar sus conclusiones al Comité Permanente. La Secretaría considera que dichas conclusiones serán útiles para que el Grupo de trabajo sobre requisitos especiales para la presentación de informes pueda concluir su examen.

Resumen ejecutivo del  
Estudio relativo a la presentación de informes sobre el comercio de plantas  
reproducidas artificialmente de taxa incluidos en el Apéndice II

Realizado por el Centro de Monitoreo de la Conservación Mundial del PNUMA

1. Este informe ha sido elaborado para contribuir a la aplicación de la Decisión 14.39 (Rev. CoP15) y en él se proporciona:
  - a) un análisis sobre el nivel y la coherencia con el que las Partes en la CITES presentan sus informes sobre el comercio de plantas reproducidas artificialmente de taxa incluidos en el Apéndice II;
  - b) la identificación de posibles evidencias de comercio ilegal de dichos especímenes a partir de los informes nacionales CITES; y
  - c) la identificación de elementos vinculantes y no vinculantes existentes para la presentación de informes sobre especies de plantas incluidas en el Apéndice II.
2. El comercio de especímenes reproducidos artificialmente de especies de plantas incluidas en el Apéndice II de la Convención es considerable, con aproximadamente 668 millones de plantas vivas declaradas como (re)exportadas durante el período 2001-2010, además de múltiples partes y derivados (plantas secas, tallos, raíces, polvo, medicinas, etc.). Los datos proporcionados por los países de importación indican un nivel superior de comercio (892 millones de plantas vivas). Gran parte de la diferencia entre las cifras de importación y exportación se puede explicar debido a la falta de datos en los informes anuales sobre las (re) exportaciones de Taiwán, provincia de China (según los datos de los países de importación, dichas exportaciones alcanzaron aproximadamente un total de 377 millones de plantas).
3. Las Directrices para la preparación y presentación de los informes anuales CITES (Notificación a las Partes 2011/19 del 17/02/11) especifican que se debe informar sobre el comercio de plantas a nivel de especie o, si esto es imposible para los taxa incluidos en los Apéndices por familia, a nivel de género, al igual que cuando se trata de especímenes de híbridos de orquídeas del Apéndice II reproducidos artificialmente.
4. La presentación de informes que realizan las Partes sobre el comercio de plantas reproducidas artificialmente de taxa incluidos en el Apéndice II no es homogénea. Algunas Partes indican que no informan sobre el comercio autorizado con certificados fitosanitarios (Dinamarca y Noruega) mientras que otras indican que informan sobre el comercio en niveles taxonómico diferentes a los que se especifican en el texto de la Convención y en las Directrices. Por otra parte, según lo establecido en el contrato con la Secretaría CITES para la gestión de la base de datos, no es preciso introducir en la Base de datos sobre el comercio CITES el comercio de plantas reproducidas artificialmente de taxa incluidos en el Apéndice II que no se comunique en versión electrónica.
5. Las diferencias en el nivel taxonómico utilizado en el informe parecen ser la causa de la mayoría de las variaciones en los informes sobre el comercio de plantas reproducidas artificialmente de taxa incluidos en el Apéndice II. Los países de importación tienden a informar el comercio en un nivel taxonómico superior al de los países de exportación. Por ejemplo, Estados Unidos de América informa sobre los taxa al nivel en que han sido incluidos en los apéndices de la CITES (por ejemplo, *Orchidaceae* para las orquídeas incluidas en el Apéndice II). Por lo demás, la presentación de informes sobre el comercio de plantas reproducidas artificialmente incluidas en el Apéndice II parece ser coherente de manera general con las recomendaciones de las Directrices para la preparación y presentación de los informes anuales CITES relativas a la inclusión de códigos de origen y de propósito.
6. La presentación de informes sobre el comercio de plantas reproducidas artificialmente de taxa incluidos en el Apéndice II puede ser engorrosa, según lo expresado por dos de las Partes que respondieron al cuestionario y una de dichas Partes ha adoptado un protocolo de presentación de informes racionalizado.
7. Según los datos que figuran en la Base de datos sobre el comercio CITES, durante el período 2006-2010, 93 Partes presentaron información sobre decomisos de plantas vivas, partes o derivados. Esto incluía más de 94.000 plantas vivas de taxa incluidos en el Apéndice II que fueron comunicadas como

decomisadas (origen "I"). La mayor parte correspondía al comercio de orquídeas presuntamente ilegal: el 79% de los decomisos correspondía a plantas vivas de la familia de las Orchidaceae incluidas en el Apéndice II. Más del 60% de los datos de decomisos de plantas vivas fueron comunicados a nivel de género o familia. Aproximadamente las tres cuartas partes de los decomisos tenían como origen la región geográfica CITES de Asia.

8. Debido a que en la Base de datos sobre el comercio CITES no se comunica el origen del material decomisado (reproducido artificialmente, silvestre, etc.) rara vez se puede inferir la existencia de comercio presuntamente ilegal de plantas reproducidas artificialmente a partir de esta fuente de datos. Actualmente, en la Base de datos sobre el comercio CITES sólo se puede incluir un código de origen y los decomisos están incluidos bajo el código de origen "I". Sin embargo, más de 25.000 especímenes decomisados eran especímenes híbridos de especies de plantas incluidas en el Apéndice II y por consiguiente, es probable que hubieran sido reproducidos artificialmente. Además, en el caso de los 10 taxa más frecuentemente señalados como decomisados para el período 2006-2010, prácticamente todo el comercio legal (según aparece en la Base de datos sobre el comercio CITES) correspondía a especímenes producidos por reproducción artificial en lugar de extraídos del medio silvestre.
9. Los informes bienales constituyen otra fuente de datos sobre las confiscaciones/decomisos de taxa de plantas y 13 Partes presentaron información de este tipo en sus informes para el período 2007-2008. La familia más presente en los datos de decomisos, según los informes bienales, fue *Cactaceae spp.*, mientras que tanto *Orchidaceae spp.* como *Cactaceae spp.*, tuvieron una fuerte presencia según la bibliografía publicada y otros informes consultados. En los informes bienales, más del 80% de los datos de decomisos de plantas vivas fueron comunicados a nivel de género o familia. Sin embargo, no fue posible realizar un análisis más profundo de la información sobre el comercio ilegal presentada en los informes bienales puesto que ésta era poco homogénea y estaba incompleta. Se podría mejorar la calidad de la información a través de orientaciones más completas sobre la elaboración de las respuestas a las preguntas del informe bienal.
10. Existen muy pocos indicios que sugieren que el comercio de especies individuales se ha trasladado del origen silvestre al de reproducidas artificialmente durante los 10 años para los cuales se examinaron los datos, con la posible excepción de *Cyclamen cilicium*. Sin embargo, aparentemente muchos nuevos taxa están emergiendo en el comercio como reproducidos artificialmente, con 326 taxa que cumplen con el criterio de "incremento marcado del comercio" en 2009 o 2010 (se informó que los niveles de comercio para el taxón era tres veces superior al volumen medio de los cinco años anteriores). La lista de los taxa emergentes podría ser proporcionada al Comité de Flora para que sus miembros determinen si, en su opinión de expertos, es probable que las exportaciones sean conformes a la Resolución Conf. 11.11 (Rev. CoP13), ajustándose a la definición de reproducidos artificialmente.
11. Se somete una serie de opciones a la consideración del Comité de Flora como vía para racionalizar la presentación de informes de plantas reproducidas artificialmente incluidas en el Apéndice II, para así reducir la carga que representan dichos informes. Dichas opciones se centran en la viabilidad de presentar la información utilizando niveles taxonómicos superiores, a la vez que se mantiene la obligación de comunicar la información correspondiente a cada envío (es decir, con los detalles de cada país exportador e importador).

Opciones que se someten a la consideración del Comité de Flora con relación a la revisión de la presentación de informes sobre el comercio de plantas reproducidas artificialmente incluidas en el Apéndice II

Centro de Monitoreo de la Conservación Mundial del PNUMA

Según algunas respuestas al cuestionario, el control estricto del comercio de plantas reproducidas artificialmente incluidas en el Apéndice II parece constituir una carga considerable en el cumplimiento de las obligaciones de presentación de informes establecidas por la Convención en el caso de las Partes que tienen un alto volumen de comercio en dichos taxa.

A continuación se someten a la consideración del Comité de Flora cuatro opciones para racionalizar la presentación de informes sobre plantas reproducidas artificialmente incluidas en el Apéndice II, con el objetivo de revisar las directrices actuales relativas al nivel taxonómico aceptado para la presentación de los informes.

Sólo hay un porcentaje muy reducido de informes que no incluyen la información especificada en la Resolución Conf. 12.3 (Rev. CoP15), por ejemplo, la inclusión de los códigos de origen y propósito, el tipo de espécimen, cantidad comercializada, y país de importación y (re)exportación). Si bien la presentación de información en base a cada envío puede constituir una carga para las Partes, también puede contribuir a identificar cambios en las tendencias a lo largo del tiempo y, por consiguiente, se recomienda que el Comité de Flora considere la posibilidad de mantener esta orientación conjuntamente con las diferentes opciones que se describen más abajo.

Dichas opciones tienen como objetivo reducir la carga de presentación de informes que recae en las Partes, a la vez que se mantiene la posibilidad de hacer un seguimiento de las tendencias emergentes y de la aplicación de la Convención. También se podría optar por una combinación de estos métodos posibles.

1. **Adoptar el método seguido por Estados Unidos que consiste en comunicar la información sobre las plantas reproducidas artificialmente de taxa incluidos en el Apéndice II siguiendo el nivel taxonómico de inclusión en los Apéndices de la CITES, ya sea a nivel de familia, de género o de especie.**

Siguiendo este método, las especies incluidas en los Apéndices a nivel de género o familia se registran en dicho nivel, así pues los especímenes de *Orchidaceae* se registran como *Orchidaceae spp.* Este método tiene la ventaja de haber sido puesto a prueba por uno de los principales importadores que lo ha estado aplicando durante más de 10 años. Habida cuenta de que la mayoría del comercio de taxa de plantas reproducidas artificialmente se realiza con especies que han sido incluidas a nivel de familia (todas las *Orchidaceae*, *Cactaceae* y *Cycadaceae*) ello constituiría un cambio significativo en la presentación de informes. Sin embargo, cabe señalar que Estados Unidos conserva información específica por especies en los archivos en caso de que fuera necesario un examen ulterior.

El lado negativo de que se adopte el método de registrar en un nivel taxonómico superior es que éste incumple aparentemente la disposición de la Convención de que se informe sobre especímenes de especies incluidas en los Apéndices I, II y III (Artículo VIII, párrafo 7 (a), y párrafo 6 (b)). Además, en los casos en que los taxa se comercian como plantas reproducidas artificialmente y como plantas extraídas del medio silvestre la información detallada a nivel de especie ya no estará disponible para detectar patrones inusuales del comercio que puedan indicar problemas de aplicación con relación al comercio no sostenible y/o ilícito.

2. **Presentar la información sobre el comercio a un nivel taxonómico superior para todas las reexportaciones de especímenes reproducidos artificialmente de especies incluidas en el Apéndice II**

Siguiendo el punto de vista según el cual los recursos de la Autoridad CITES deben concentrarse en especímenes que aparecen por primera vez en el comercio internacional, la presentación de información a nivel de especie puede ser menos valiosa para cualquier reexportación subsiguiente de plantas reproducidas artificialmente incluidas en el Apéndice II. Si se acepta este criterio, el comercio en los casos de reexportaciones podría ser comunicado ya sea a nivel de género o de familia, a condición de que las



reexportaciones se diferencien claramente de las exportaciones directas en los informes anuales mediante la indicación del país de origen.

Las limitaciones de este método son i) este método no racionaliza la presentación de informes para una proporción sustancial del comercio pues la proporción del comercio total de especímenes vivos de especies incluidas en el Apéndice II que es supuestamente reexportada (a partir de lo indicado a través de la inclusión de los datos sobre el país de origen en los informes anuales) es de sólo un 2,2% y un 2,6% según lo comunicado por los países de importación y de exportación, 2006-2010; ii) no está clara la base de evidencias en que se apoya la focalización en los especímenes que aparecen por primera vez en el comercio.

### **3. Presentar la información a nivel de género únicamente en el caso de los híbridos**

El comercio de híbridos representa una proporción considerable del comercio de plantas reproducidas artificialmente (23% según lo comunicado por los exportadores, 2006-2010). No existen poblaciones silvestres presentes de manera natural de híbridos incluidos en los Apéndices de la CITES (es decir que todos han sido producidos mediante métodos de reproducción artificial). Como se señala en el documento PC14 Doc. 8.1, haciendo referencia específicamente a las orquídeas, el comercio de orquídeas híbridas reproducidas artificialmente no presenta ninguna amenaza directa flagrante para las poblaciones de orquídeas silvestres. Por consiguiente, la presentación de informes detallados sobre el comercio de híbridos puede ser menos valiosa.

La información sobre todos los híbridos podría ser presentada a nivel de género o a nivel de familia cuando se trate de híbridos intragenéricos. Actualmente, la inclusión de híbridos intragenéricos en la Base de datos sobre el comercio CITES se realiza a nivel de familia debido a las limitaciones de la base de datos.

La ventaja de este método simple es que su implementación sería relativamente sencilla para las Partes. La actual exención en cuanto a presentación de informes que se aplica únicamente a los híbridos de orquídeas puede causar confusión, pues algunas Partes presentan la información a nivel de género para todos los híbridos de orquídeas y otras Partes utilizan este método para todos los híbridos de plantas. Es un hecho que las orquídeas constituyen la gran mayoría de los híbridos cuyo comercio fue comunicado (>99% según los datos de exportación, 2006-2010). La principal limitación de este método es que no racionalizará la presentación de informes para una proporción considerable del comercio.

### **4. Proporcionar informes detallados con relación a los taxa descritos recientemente y los taxa reproducidos artificialmente cuyo comercio no se constata regularmente o que están emergiendo en el comercio. La información sobre los taxa constatado regularmente en el comercio podría ser presentada a nivel de género/familia.**

Siguiendo este método, serán necesarios informes detallados (a nivel de especies) en el caso de:

- las especies recientemente descritas (según determine el Comité de Flora)
- los taxa que no han sido reexportados previamente desde un país como reproducidos artificialmente (de manera que se puedan continuar detectando las tendencias emergentes en el comercio)

No se requerirán informes anuales detallados (a nivel de especie) en el caso de las especies incluidas en una lista de taxa constatados regularmente en el comercio como reproducidos artificialmente (basándose en los niveles de comercio de más de 100 especímenes para 8 de los 10 años más recientes, que hayan sido objeto de transacciones con fines comerciales). La información sobre dichos taxa, conjuntamente con la de todos los híbridos y la de las reexportaciones podría ser presentada a nivel de familia. De ser necesario, se puede proporcionar, previa solicitud, una lista de especies que se ha determinado que están presentes en el comercio regularmente en cuyo caso los informes podrían presentarse a nivel de género o familia.

Se podría distribuir una lista a las Partes a través de una notificación o se podría incluir en las Directrices para la preparación y presentación de los informes anuales CITES. Sería necesario actualizarla con bastante regularidad (al menos anualmente) para tomar en cuenta las tendencias emergentes en el comercio.

En este caso, la dificultad del método es que obligaría a las Partes a consultar una amplia lista de especies que iría cambiando con el tiempo, a menos que las Partes puedan automatizar este proceso a través de herramientas tales como la emisión electrónica de permisos.

### **Observaciones adicionales**

Para aprovechar al máximo los datos que figuran en los informes bienales con el objetivo, entre otros, de profundizar el análisis de las tendencias se necesitarán directrices para la normalización de los datos. Se recomienda que el Comité Permanente de la CITES (tal vez a través de su Grupo de trabajo sobre requisitos especiales para la presentación de informes) considere un formato normalizado para la presentación de información sobre los decomisos en los informes bienales.

En total, un 76% de las plantas vivas cuyo decomiso o confiscación fue comunicado tenían como origen la Región Asia (siguiendo la definición de la CITES) lo cual corresponde al porcentaje de comercio legal a partir de Asia. Se recomienda continuar la vigilancia con relación al comercio de plantas a partir de la Región Asia.

En el futuro, las Partes que están desarrollando sistemas de emisión electrónica de permisos con capacidad para el intercambio automático de datos (por ejemplo, a través de XML) tal vez puedan comunicar sus datos con relación a los permisos directamente para que sean incluidos en los datos de los informes anuales en la Base de datos sobre el comercio CITES. Si las Partes deben disponer de los detalles completos de los envíos para la emisión electrónica de permisos, entonces la comunicación de los detalles completos de todos los envíos de plantas reproducidas artificialmente incluidas en el Apéndice II objeto de comercio no debería representar una carga de presentación de informes para las Partes. Esta carga seguiría existiendo en el caso de las Partes que no disponen de dichos sistemas electrónicos.

Las partes que actualmente están considerando herramientas de intercambio de datos (servicios web) tal vez deseen participar en el proyecto EPIX (Intercambio de Información sobre Permisos Electrónicos) del PNUMA-CMCM, a través del cual otras Partes en la CITES pueden realizar búsquedas e intercambiar datos sobre Permisos CITES a través de Internet en tiempo casi real. Se podría estudiar este sistema para someter a prueba la viabilidad de la captura electrónica de datos sobre los permisos con el objetivo de racionalizar la presentación de informes anuales sobre los especímenes reproducidos artificialmente de especies incluidas en el Apéndice II.

El lanzamiento de la lista automatizada de especies CITES en 2013, con un módulo de búsqueda rápida, podría ayudar a responder a la problemática planteada por las Partes con relación a la dificultad en la presentación de informes coherentes utilizando la nomenclatura normalizada CITES.

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## **Study of Reporting on Trade in Artificially Propagated Plants of Taxa included CITES Appendix II**

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CITES Project No. S-394

September 2013

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#### **ABOUT UNEP-WORLD CONSERVATION MONITORING CENTRE**

The UNEP World Conservation Monitoring Centre (UNEP-WCMC), based in Cambridge, UK, is the specialist biodiversity information and assessment centre of the United Nations Environment Programme (UNEP), run cooperatively with WCMC, a UK charity.

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## Contents

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<b>Summary .....</b>	<b>1</b>
<b>Introduction.....</b>	<b>3</b>
<b>Methodology .....</b>	<b>4</b>
<b>Summary of recent trade in artificially propagated specimens of plant species listed in Appendix II.....</b>	<b>6</b>
<b>CITES reporting requirements relevant to Appendix II artificially propagated plants .....</b>	<b>11</b>
<b>Degree and completeness of reporting of trade by CITES Parties .....</b>	<b>13</b>
<b>Summary of current reporting practices .....</b>	<b>20</b>
CONCLUSIONS ON THE DEGREE AND COMPLETENESS OF REPORTING OF TRADE IN APPENDIX II ARTIFICIALLY PROPAGATED PLANTS .....	22
<b>Illegal trade detection through the compilation of trade data – analysis of seizures recorded in national reports.....</b>	<b>23</b>
ANNUAL REPORTS.....	25
BIENNIAL REPORTS.....	28
REVIEW OF EXISTENCE/EXTENT OF ILLEGAL TRADE IN ARTIFICIALLY PROPAGATED PLANTS.....	28
ANALYSIS OF TRADE TRENDS .....	31
CONCLUSIONS ON ILLEGAL TRADE IN APPENDIX II PLANT TAXA .....	34
<b>Options for the Plants Committee to consider in relation to revised reporting of artificially propagated plants listed in Appendix II.....</b>	<b>35</b>
ADDITIONAL OBSERVATIONS.....	36
REFERENCES .....	38

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## Summary

1. This report was developed to assist with implementation of Decision 14.39 (Rev. CoP15). It provides:
  - an analysis of the degree and consistency with which CITES Parties report on trade in artificially propagated plants of taxa included in Appendix II;
  - identification of potential evidence for illegal trade in such specimens from CITES national reports; and
  - identification of the existing binding and non-binding elements of reporting for plant species listed in Appendix II.
2. Trade in artificially propagated specimens of plant species listed in Appendix II of the Convention is substantial, with approximately 668 million live plants reported as (re-)exported during the period 2001-2010, in addition to many parts and derivatives (dried plants, stems, roots, powder, medicines etc.). The data provided by countries of import indicate a higher level of trade (892 million live plants). Much of the difference between import and export figures can be explained by the lack of annual report data on (re-)exports from Taiwan, Province of China (according to data from countries of import, these exports totalled almost 377 million plants).
3. The Guidelines for the preparation and submission of CITES annual reports (Notification to the Parties 2001/19 of 17/02/11) specify that trade in plants should be reported at the species level, but where this is not possible, it can be reported at the generic level for taxa included in the CITES Appendices by family, or where the specimens are artificially propagated Appendix II orchid hybrids.
4. Reporting by Parties on trade in artificially propagated plants of taxa included in Appendix II is inconsistent. Some Parties indicate that they do not report trade authorized with phytosanitary certificates (Denmark and Norway), whilst other Parties indicate that they report trade at different taxonomic levels than specified in the Convention text and guidelines. Also, trade in artificially propagated plants of taxa included in Appendix II that is not reported electronically, is not required to be entered into the CITES Trade Database according to the database management contract with the CITES Secretariat.
5. Differences in the taxonomic level of reporting appear to account for the majority of variation in reporting on trade in artificially propagated plants of taxa included in Appendix II. Countries of import tend to report trade at a higher taxonomic level than countries of export. For example, the United States of America reports taxa at the level at which they are listed in the CITES Appendices (e.g. Orchidaceae for Appendix-II-listed orchids). Otherwise, reporting of trade in Appendix II artificially propagated plants appears to be broadly consistent with the recommendations in the *Guidelines for the preparation and submission of CITES annual reports* relating to inclusion of source and purpose codes.
6. Reporting trade in artificially propagated plants of taxa included in Appendix II can be burdensome, according to two Parties that responded to the questionnaire and one of these Parties has adopted a streamlined reporting protocol.
7. Seizures of live plants, parts or derivatives were reported by 93 Parties during the period 2006-2010, according to data within the CITES Trade Database. This included,

over 94,000 live plants of taxa included in Appendix II reported as seized (source “I”). Suspected illegal trade in orchids was most prevalent; with 79% of seizures in live Appendix II plants of the family Orchidaceae. More than 60% of the seizure data for live plants were reported at the level of genus or family. Approximately three-quarters of the seizures originated in the CITES geographic region of Asia.

8. As the origin (artificially propagated, wild etc) of seized material is not reported in the CITES Trade database it is rarely possible to infer suspected illegal trade in artificially propagated plants from this data source. Currently, only one source code can be included in the CITES trade the database and seizures are included under source code “I”. However, over 25,000 seized specimens were hybrid specimens of Appendix II plant species and thus were likely to have been artificially propagated. Moreover, for the ten taxa most commonly reported as seized for 2006-2010, virtually all of the legal trade (as reported in the CITES Trade Database) was in specimens produced by artificial propagation rather than wild-collected.
9. Biennial reports represent another source of data on confiscations/seizures of plant taxa and 13 Parties presented such information in their 2007-2008 reports. Cactaceae spp., was the family most highly represented in seizures data according to Biennial reports, whilst both Orchidaceae spp. and Cactaceae spp., were well represented according to published literature and other reports consulted. More than 80% of the seizure data for live plants were reported at the level of genus or family in biennial reports. However, further analysis of biennial report information on illegal trade was not possible as the information was inconsistent and incomplete. The quality of the information could be improved through more comprehensive guidance on completion of the biennial report questions.
10. There is very little evidence to suggest that trade in individual species has moved from wild to artificially propagated sources during the ten years for which data was examined, except possibly for *Cyclamen cilicium*. However, it appears that many new taxa are emerging in trade as artificially propagated, with 326 taxa meeting a “sharp increase in trade” criterion for 2009 or 2010 (the taxon was reported at trade levels of three times the average volume for the five preceding years). The list of emerging taxa could be provided to the Plants Committee for them to advise whether, on the basis of expert opinion, exports are in likely to be accordance with Resolution Conf. 11.11 (Rev. CoP13), meeting the definition of artificially propagated .
11. A number of options are presented for consideration by the Plants Committee as a means to streamline the reporting of Appendix II artificially propagated plants, thereby reducing the reporting burden. These options focus on the feasibility of reporting at higher taxon levels, whilst retaining the requirement to report on a shipment-by-shipment basis (i.e. details of each exporting and importing country).

## Introduction

In accordance with Article VIII of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Parties are required to submit annual reports detailing the trade that they have permitted in species listed in the CITES Appendices. The data from these reports are entered into the CITES Trade Database, managed by UNEP-WCMC under contract to the CITES Secretariat. CITES trade data are an important tool for tracking the trade which occurs under the Convention and monitoring implementation of the Convention, and may also facilitate the detection of potentially detrimental or illicit trade.

Reporting of trade in plant specimens should follow the *Guidelines for the preparation and submission of CITES annual reports* distributed with CITES Notification to the Parties No. 2011/019 (17/02/11). However, questions have been raised concerning the value and efficacy of this reporting in relation to trade in artificially propagated plants of taxa included in Appendix II (see CoP14 Doc.30). An analysis of the current reporting requirements and recommendations was deemed appropriate (CoP14 Doc 30) in order to consider ways of streamlining reporting, minimising burdens for national authorities and focusing reporting on species with conservation needs.

As a result, Parties to CITES adopted Decision 14.39 (Rev. CoP15) directed to the Secretariat, in consultation with UNEP WCMC, to:

- a) conduct a survey of reporting practices of Parties relating to trade in artificially propagated plants of taxa included in Appendix II, e.g. regarding the degree of completeness and detail;
- b) identify cases where the compilation of trade data pertaining to artificially propagated plants of taxa included in Appendix II has contributed to a significant extent to the detection of illegal trade or to any other analysis related to the conservation of wild flora;
- c) taking into consideration the results of paragraphs a) and b) above, analyse the Convention text and Resolutions in order to identify binding and non-binding elements of reporting, with special emphasis on artificially propagated plants of taxa included in Appendix II.

This report aims to assist the CITES Secretariat in implementation of Decision 14.39 (Rev, CoP15). It provides an analysis of the degree and consistency with which CITES Parties report on trade in artificially propagated of taxa included in Appendix II, identifies any potential evidence for illegal trade in such specimens from CITES national reports, published literature and other reports, and identifies the existing binding and non-binding elements of reporting of artificially propagated plants of taxa included in Appendix II.

A number of potential options are suggested as a means to reduce the reporting burden for Parties in relation to trade in artificially propagated plants of taxa included in Appendix II. These options may assist the Plants Committee in assessing whether there are any Appendix II taxa for which reporting at the species level is less valuable and might be replaced by reporting at higher taxonomic levels.



## Methodology

Trade data were extracted from the CITES Trade Database for specimens of plant species listed in Appendix II with source codes “A” (artificially propagated), “W” (wild) and “I” (confiscated/seized) for the ten years 2001-2010. However, where data on artificially propagated plants of taxa included in Appendix II are not provided electronically by Parties, the Secretariat does not require UNEP-WCMC to enter these data manually into the Database. Consequently, data for artificially propagated plants of taxa included in Appendix II are incomplete.

### **Activities addressing objective a) to assess completeness of Party reporting practices:**

To assess the degree of detail and completeness of current reporting practices for artificially propagated plants of taxa included in Appendix II, trade data were examined against the recommendations concerning the standardisation of CITES permits and certificates (as outlined in Resolution Conf. 12.3 (Rev. CoP15)–Permits and Certificates and Annex 1 of this resolution. In particular, this assessment focussed on the use of the full species name or a higher taxon, source and purpose code, type of specimen (term), quantity in trade, and country of import and export/re-export for the five years 2006-2010.

A sample of non-electronic reports (provided as printed permits) was consulted to determine the effect of not including reports in the CITES Trade Database where data on artificially propagated Appendix II plants was not provided electronically. Permits for three Parties (Guyana, Peru and Suriname) which had not provided one or more annual reports in an electronic format for the years 2006-2010 were consulted. It was not possible to conduct a complete ten year review of reporting practices for these Parties within the time available, as this would have required consultation with an additional 43 hard copy reports (provided as permits) for the years 2001-2005.

Correspondence received by UNEP-WCMC from Parties regarding their annual reports was referred to for the year 2010, in order to gain additional information on annual reporting practices which refer specifically to artificially propagated plants.

A questionnaire was devised to gather information on the practices of Parties in the reporting of trade in artificially propagated plants of species in CITES Appendix II, and to provide an opportunity for Parties to identify and describe any problems they had encountered in reporting such trade. The questionnaire was translated into the three working languages of the Convention and distributed at the 20th meeting of the Plants Committee (Ireland, March 2012) and also circulated to Parties with Notification to the Parties No. 2012/032 (28/03/12). Parties were urged to respond within the deadline (30/04/2012), approximately one month after circulation. The questionnaire is provided in Annex A.

### **Activities addressing objective b): to identify where compilation of trade data has enabled detection of illegal trade**

To identify any taxa frequently reported with regard to suspected illegal trade, data on seizures of artificially propagated plants of species listed in Appendix II contained within both CITES annual reports for the period 2006-2010 and biennial reports for the period 2007-2008 were analysed.

Any changes in trade patterns or discrepancies in the reporting by exporting and importing countries were noted for Appendix II taxa that have been reported in trade as artificially propagated (e.g. shifts in source codes reported over time, emerging trade in taxa, trade where the exporter is not a range State).

A short literature review to gather additional information on the existence and extent of illegal trade in artificially propagated Appendix II species was conducted. Searches used a number of online resources (ISI Web of Knowledge<sup>1</sup>, Google Scholar and Google) in May 2012 to find relevant literature on suspected or proven cases of illegal trade in artificially propagated plants of species listed in CITES Appendix II. Searches were also made using the TRAFFIC (a non-governmental organization) Publication Search<sup>2</sup>.

Key search terms included “illegal trade artificially propagated Appendix II species” and “illegal trade artificially propagated plants”. Searches were also performed to identify papers on the illegal trade in wild plant taxa using Google Scholar. Search terms used related to top plant taxa reported as confiscated or seized during the period 2006-2010 and top plant species exported as live specimens during the period 1996-2010 (e.g. “illegal trade *Phalaenopsis* spp.”). Reported seizures of plant species were noted from the TRAFFIC Bulletin Seizures and Prosecutions Section dating back to 1999.

Parties’ current practices for reporting illegal trade in national reports, as well as any other evidence of illegal trade provided by Parties in response to the questionnaire, were also summarised.

#### **Activities addressing objective c): to identify binding and non-binding elements of reporting**

Reporting requirements relevant to Appendix II artificially propagated plants were summarised and categorised as either binding or non-binding, consulting the Convention text and Resolutions. Observations on reporting practices and the existing requirements of the Convention were made.

#### **Definitions**

This report does not consider artificially propagated specimens of species listed in Appendix I which may be deemed to be specimens of species included in Appendix II for the purposes of facilitating trade in accordance with Article VII, paragraph 4 of the Convention. These specimens remain specimens of species in Appendix I and trade should be reported accordingly. Any trade of this nature, but not reported in this way, is included in the CITES Trade Database as trade in specimens of species listed in Appendix I by UNEP-WCMC.

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<sup>1</sup> <http://apps.webofknowledge.com>

<sup>2</sup> <http://www.traffic.org/search-publications>

## Summary of recent trade in artificially propagated specimens of plant species listed in Appendix II

To provide some context for the overall analysis contained in this report and in particular with regard to illegal trade, a brief summary of legal trade in artificially propagated plants listed in CITES Appendix II is provided for the ten year period 2001-2010. As the trade is principally in live specimens reported in number (rather than by weight) this is the main focus of the short summary of data from the CITES Trade Database presented in this section.

The total volume of live specimens of plant species listed in Appendix II (re-)exported between 2001 and 2010 was almost 970 million specimens as reported by countries of export. Artificially propagated specimens represented approximately 69% of this trade, with over 668 million live plants reported (re-) exported, with the remainder of the trade in specimens originating from the wild. Trade reported by countries of import was substantially higher with a total of 892 million artificially propagated, live specimens of Appendix II plant species reported in trade. This difference can be explained by the fact that according to country of import reported data, Taiwan, Province of China is the source of exports totalling almost 377 million plants; however, the annual reports of China do not include data on the trade of Taiwan, Province of China.

The total volume of trade in live, artificially propagated specimens of plant species listed in Appendix II peaked in 2006 according to country of export-reported data, and in 2008 according to country of import-reported data, and then subsequently decreased (Figures 1ai and 1bi). There has been some indication of a shift in the source of trade in live Appendix II plants in trade over the ten-year period 2001-2010, with the proportion of artificially propagated specimens showing an increase, according to data reported by both country of export and country of import (Figure 1aii).

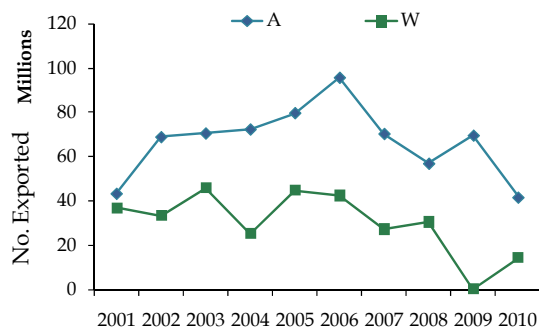


Figure 1ai. Trade in live, artificially propagated ('A') and wild-sourced ('W') plants listed in CITES Appendix II reported by exporters, 2001-2010. All trade reported in number rather than by weight.

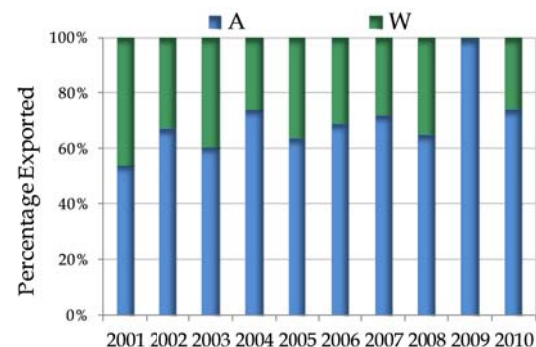


Figure 1aii. The proportion of trade in live plants listed in CITES Appendix II reported by exporters 2001-2010 as artificially propagated ('A') and wild sourced ('W'). All trade reported in number rather than by weight.

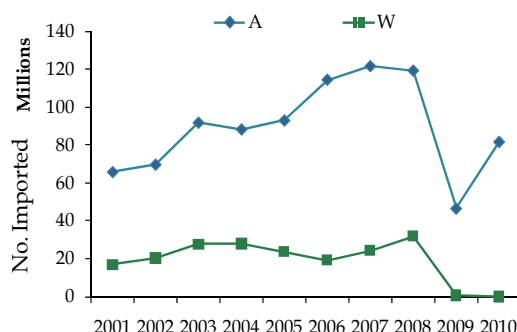


Figure 1bi. Trade in live, artificially propagated ('A') and wild-sourced ('W') plants listed in CITES Appendix II reported by importers, 2001-2010. All trade reported in number rather than by weight.

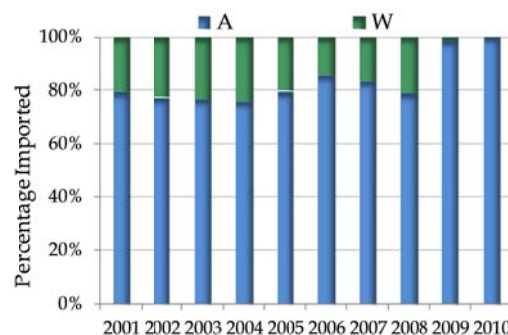


Figure 1bii. The proportion of trade in live plants listed in CITES Appendix II reported by importers 2001-2010 that is artificially propagated ('A') and wild-sourced ('W'). All trade reported in number rather than by weight.

A total of 38 families and over 10,200 taxa were reported as artificially propagated for Appendix II specimens during the period 2001-2010, as reported by countries of export. The three families that accounted for the majority of trade, were Orchidaceae, Cactaceae and Cycadaceae. The proportions of trade in artificially propagated specimens (excluding trade reported by weight) contributed by these families differed depending on whether the trade was reported by countries of export or countries of import. According to data reported by countries of export, Orchidaceae represented 52% of the trade, Cactaceae represented 20% of trade, and Cycadaceae, represented a further 9% (Figure 2). In comparison, the relative percentages as reported by countries of import were 75% for Orchidaceae, 8% for Cactaceae and 6% for Cycadaceae. Much of this difference is due to the lack of reporting of exports from Taiwan Province of China, which specialises in production of Orchidaceae.

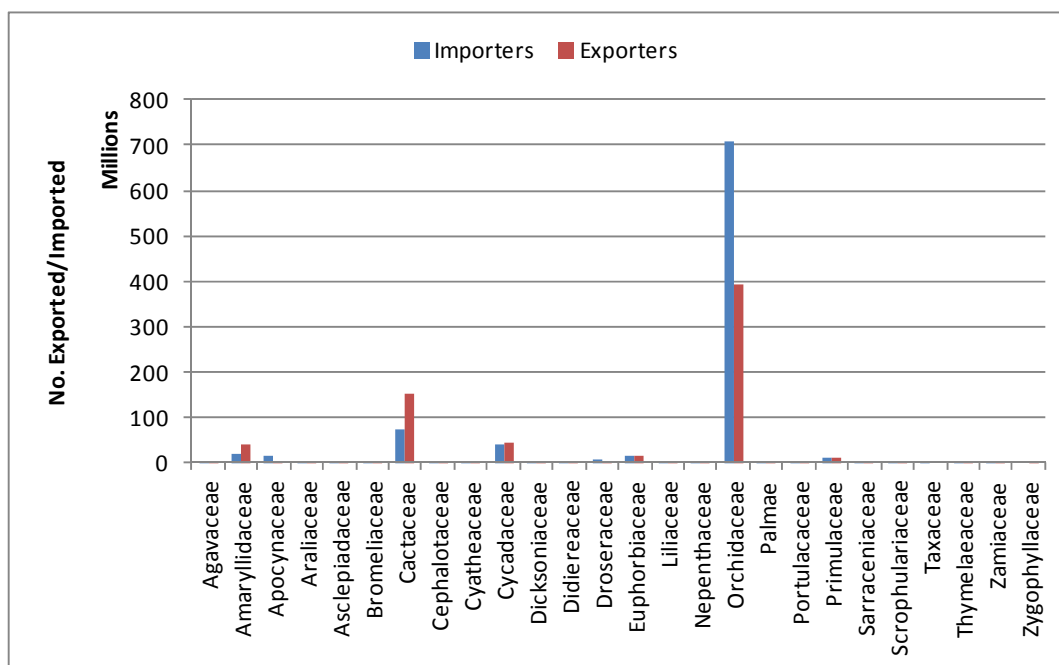


Figure 2. Trade in artificially propagated Appendix II live plants as reported by exporters and importers 2001-2010 (main families only).

The ten most common artificially-propagated Appendix II-listed species in trade are presented in Table 1. In many cases there are notable differences between data reported by countries of export and those reported by countries of import. Discrepancies in volume of trade between the reports of countries of import and the countries of export cannot be accounted for by differences in the source code reported by the different trading partners (reporting 'A' as 'W' or vice versa).

Table 1. The ten most common artificially-propagated Appendix II-listed species in trade and total volume of trade reported as source 'A' and source 'W' (including only trade reported without a unit, and excluding timber and timber derivatives), 2001-2010.

Species	Reported by	A	W
<i>Cycas revoluta</i>	Exporter	65,700,832	10
(Cycad)	Importer	42,662,976	277
<i>Hoodia gordonii</i>	Exporter	47,480,975	45,596,820
(Bitter ghaap)	Importer	35,310,025	15,046,424
<i>Cymbidium sinense</i>	Exporter	15,703,721	
(Ink orchid)	Importer	28,108,037	42
<i>Cymbidium aloifolium</i>	Exporter	35,463	
(Orchid)	Importer	18,791,031	40
<i>Cymbidium ensifolium</i>	Exporter	2,649,693	
(Common fragrant cymbidium)	Importer	17,740,575	51
<i>Galanthus nivalis</i>	Exporter	27,774,985	2,250
(Common snowdrop)	Importer	9,112,481	1,500
<i>Cyclamen hederifolium</i>	Exporter	9,650,758	9,961,617
(Sowbread)	Importer	8,249,126	9,471,146
<i>Gymnocalycium mihanovichii</i>	Exporter	46,457,697	
(Cactus)	Importer	6,576,686	
<i>Sternbergia lutea</i>	Exporter	7,912,201	5,520
(Common sternbergia)	Importer	5,610,143	6,895
<i>Hylocereus undatus</i>	Exporter	22,708,624	600
(Cactus)	Importer	5,491,648	600

The ten most commonly traded plant taxa represented 16% of the trade in live artificially propagated plants listed in Appendix II during 2001-2010 as reported by importers. Although some taxa such as *Cycas revoluta* and *Cymbidium* spp. were highly traded over the entire ten years, there have been some shifts in the composition of taxa traded. *Phalaenopsis* emerged as the most highly traded genus of artificially propagated live plants listed in Appendix II in recent years (2006-2010), representing a third of all trade in this five year period compared to only 13% between 2001 and 2005 (Tables 2 and Figure 3). In addition to trade reported as *Phalaenopsis* spp. or *Phalaenopsis* hybrid, 429 species in the genus were reported in trade by exporters. Many of the highly traded genera in recent trade (*Cymbidium*, *Dendrobium*, and *Phalaenopsis*) naturally occur in the Asian region. Of all legal trade in live artificially propagated orchids 2001-2010, 95% was exported from Asia.

Table 2. The top 10 plant taxa in recent trade as live individuals of artificially propagated plants listed in Appendix II, 2006-2010, as reported by countries of import and export.

Taxon	Total live artificially propagated plants listed in Appendix II reported by countries of import		Total live artificially propagated plants listed in Appendix II reported by countries of export	
	Quantity	%	Quantity	%
<i>Cymbidium</i> spp. Orchid	103957882	21.5	10869577	3.3
Orchidaceae hybrid	97673474	20.2		
Orchidaceae spp. Orchid	41822233	8.6		
<i>Dendrobium</i> spp. Orchid	22535333	4.7	23895555	7.2
<i>Phalaenopsis</i> hybrid. Orchid	20876991	4.3	50372569	15.1
<i>Phalaenopsis</i> spp. Orchid	19991090	4.1	60830937	18.2
<i>Cymbidium sinense</i> Orchid	18010055	3.7	8840268	2.6
<i>Cycas revolute</i> Cycad	17476682	3.6	27047652	8.1
Cactaceae spp. Cacti	17122608	3.5	9307682	2.8
<i>Cymbidium ensifolium</i> Orchid	16101379	3.3		
<i>Gymnocalycium mihanovichii</i> Cycad			19096745	5.7
<i>Hylocereus undatus</i> Cacti			17469001	5.2
<i>Dendrobium</i> hybrid Orchid			17249121	5.2

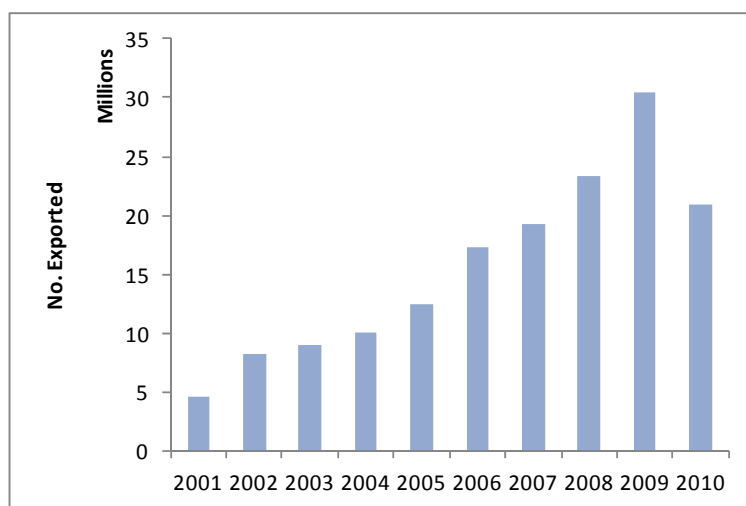


Figure 3. Reported exports of live artificially propagated *Phalaenopsis* spp. 2001-2010. The apparent decline in 2010 may be due to incomplete reporting.

A total of 83 Parties reported (re-)exports of live Appendix II-artificially propagated plants during 2001-2010. Specimens in trade principally originated in Thailand, and China (including Taiwan, province of China). The proportion of this trade originating in China was 28% according to data reported by country of export and 9% according to data reported by country of import, whilst 42% of the trade originated in Taiwan Province of China, according to data

reported by country of import. The proportion of trade originating in Thailand was 28% to 26% according to data from country of export and country of import, respectively.

The principal importers of live, artificially propagated plants listed in Appendix II were the United States of America (hereafter referred to as the United States), the Netherlands and the Republic of Korea, accounting for 24%, 21% and 14% of exporter-reported trade, respectively, and 27%, 10% and 38% of importer-reported trade, respectively. Corresponding to the main importers, re-exporters of live artificially propagated Appendix II plants 2001-2010 were predominantly the Republic of Korea, Turkey, the United States and the Netherlands.

## CITES reporting requirements relevant to Appendix II artificially propagated plants

The Convention text, Resolutions and valid Notifications were consulted to identify binding and non-binding elements of reporting for reporting trade in artificially propagated Appendix II plants. The relevant legally-binding and non-binding elements are summarised in Table 3a.

Table 3a. Reporting requirements and other measures relevant to Appendix II artificially propagated plants.

Reporting Requirements	Type	Basis	Comments
Annual and Biennial reports	Legally binding	Article VIII, paragraph 7 of the Convention text	Annual reports should contain a summary of information specified in sub-paragraph (b) para 6 of Article VIII: the number and type of permits and certificates granted; the States with which such trade occurred; the number or quantities and types of specimens, the names of the species as included in Appendices I, II and III, and where applicable, the size and sex of the specimens in question.
Annual Reports	Not legally binding	Resolution Conf. 11.17 (Rev. CoP14) National Reports and Notification to the Parties 2011/019 – <i>Guidelines for preparation of CITES annual reports</i>	Parties are urged to complete annual reports in accordance with the <i>Guidelines for the preparation of CITES annual reports</i> : <ul style="list-style-type: none"> <li>Parties should make every effort to report trade in CITES-listed plants at the species level or, if this is impossible for those taxa included in the Appendices by family, at the generic level; however, artificially propagated Appendix II orchid hybrids may be reported as such.</li> <li>Parties should distinguish in their annual reports between plant specimens of wild and of artificially propagated origin.</li> </ul>
<b>Other relevant Resolutions</b>			
Use of phytosanitary certificates as export permits		Resolution Conf. 12.3 (Rev. CoP15) - Permits and Certificates	Parties having considered the practices governing the issue of their phytosanitary certificates for export of artificially propagated Appendix II specimens, and having determined that such practices provide adequate assurance that the specimens are artificially propagated [as defined in Resolution Conf. 11.11 (Rev. CoP15)], may consider these documents as certificates of artificial propagation in accordance with Article VII, paragraph 5. Such certificates must include the scientific name of the species, the type and quantity of the specimens, bear a stamp, seal or their electronic equivalent, or other specific indication stating that the specimens are artificially propagated as defined by CITES. They may be used exclusively for the purpose of export from the country of artificial propagation of the specimens concerned
Regulation of trade in plants	Not legally binding	Resolution Conf. 11.11 (Rev. CoP15)	Observes that certain Parties that authorize export of large quantities of artificially propagated plants need to find ways of reducing paperwork while maintaining protection for wild plants and help exporters of artificially propagated plants to comply with the Convention. This Resolution also provides the definition of “artificially propagated”.



In addition to the requirements and guidelines outlined in Table 3, the Appendices, also contain certain exclusions for artificially propagated specimens of certain taxa of live plants included in Appendix II when certain conditions apply (see Table 3b). The higher taxa with exclusions for certain taxa include: Cactaceae, Orchidaceae, Cyclamen spp. and the species: *Taxus cuspidata*.

Table 3b. Taxa for which exclusions from the provisions of CITES apply under conditions.

<p><b>Cacataceae:</b> Artificially propagated specimens of the following hybrids and/or cultivars are not subject to the provisions of the Convention:</p> <ul style="list-style-type: none"> <li>– <i>Hatiora x graeseri</i></li> <li>– <i>Schlumbergera x buckleyi</i></li> <li>– <i>Schlumbergera russelliana x Schlumbergera truncata</i></li> <li>– <i>Schlumbergera orssichiana x Schlumbergera truncata</i></li> <li>– <i>Schlumbergera opuntioides x Schlumbergera truncata</i></li> <li>– <i>Schlumbergera truncata</i> (cultivars)</li> <li>– Cactaceae spp. colour mutants, grafted on the following grafting stocks: <i>Harrisia 'Jusbertii'</i>, <i>Hylocereus trigonus</i> or <i>Hylocereus undatus</i></li> <li>– <i>Opuntia microdasys</i> (cultivars).</li> </ul>
<p><b>Orchidaceae:</b> Artificially propagated hybrids of the following genera are not subject to the provisions of the Convention, if conditions, as indicated under a) and b), are met: <i>Cymbidium</i>, <i>Dendrobium</i>, <i>Phalaenopsis</i> and <i>Vanda</i>:</p> <p>a) Specimens are readily recognizable as artificially propagated and do not show any signs of having been collected in the wild such as mechanical damage or strong dehydration resulting from collection, irregular growth and heterogeneous size and shape within a taxon and shipment, algae or other epiphyllous organisms adhering to leaves, or damage by insects or other pests; and</p> <p>b) i) when shipped in non-flowering state, the specimens must be traded in shipments consisting of individual containers (such as cartons, boxes, crates or individual shelves of CC-containers) each containing 20 or more plants of the same hybrid; the plants within each container must exhibit a high degree of uniformity and healthiness; and the shipment must be accompanied by documentation, such as an invoice, which clearly states the number of plants of each hybrid; or</p> <p>ii) when shipped in flowering state, with at least one fully open flower per specimen, no minimum number of specimens per shipment is required but specimens must be professionally processed for commercial retail sale, e.g. labelled with printed labels or packaged with printed packages indicating the name of the hybrid and the country of final processing. This should be clearly visible and allow easy verification.</p> <p>Plants not clearly qualifying for the exemption must be accompanied by appropriate CITES documents.</p>
<p><b>Cyclamen persicum:</b> Artificially propagated specimens of cultivars of <i>Cyclamen persicum</i> are not subject to the provisions of the Convention. However, the exemption does not apply to such specimens traded as dormant tubers.</p>
<p><b>Taxus cuspidatae:</b> Artificially propagated hybrids and cultivars of <i>Taxus cuspidata</i>, live, in pots or other small containers, each consignment being accompanied by a label or document stating the name of the taxon or taxa and the text 'artificially propagated', are not subject to the provisions of the Convention.</p>

## Degree and completeness of reporting of trade by CITES Parties

The degree and completeness of reporting of trade in artificially propagated plants listed in Appendix II is variable between Parties because:

1. Parties may not provide data in an electronic format;
2. Parties may authorize trade using certificates rather than permits and vary in their reporting practices for these different types of documentation;
3. Parties vary in their reporting practices;
4. Parties report at different taxonomic levels.

The extent to which these factors affect reporting are examined below. Questionnaire responses are referred to in order to explain some of these differences in reporting. Twenty-three Parties and one dependent territory of the United Kingdom provided a response to a questionnaire on reporting practices for artificially propagated Appendix II plants circulated with Notification to the Parties No. 2012/032<sup>3</sup> of 28 March 2012. Responses received until 4<sup>th</sup> May 2012 were included in the analysis. One response received on 28 May 2012 was not considered because it arrived too late to be included in the analysis. A summary of the responses is provided in this section.

### ***1. Format for providing reports***

Virtually all Parties now submit their annual reports electronically. The data on artificially propagated specimens of species listed in Appendix II are therefore included in the CITES Trade Database. In the period 2006-2010, only three Parties submitted reports that were not in electronic format. Two of these Parties did not authorize trade in artificially propagated plants listed in Appendix II, and permit data were added to the Trade Database for the remaining Party. Prior to 2006, it is not clear what proportion of this trade was not recorded within the database as a result of reports being submitted in hard copy rather than electronically, as the trade may have been captured in the reports of the other trading partner, if this Party submitted their reports electronically.

### ***2. Issuance and reporting of certificates instead of permits***

Parties may authorize trade using phytosanitary certificates as certificates of artificial propagation for specimens of artificially propagated Appendix II plants, according to CITES provisions. Ten Parties and territories have notified the Secretariat that they issue phytosanitary certificates to authorise the export of artificially propagated Appendix II plants species in accordance with Resolution Conf. 12.3 (Rev. CoP15) (Permits and certificates) (Belgium, Canada, Denmark, Germany, Hong Kong Special Administrative Region of China, Italy, Netherlands, Republic of Korea, Singapore, and Sweden)<sup>4</sup>. The CITES Trade Database indicates that all of these Parties report on artificially propagated plant trade. However,

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<sup>3</sup> Argentina, Australia, Austria, Belgium, Brazil, China, Czech Republic, Denmark, Egypt, El Salvador, France, Germany, Greece, Isle of Man, Japan, Kuwait, Mexico, Norway, United Kingdom, United States of America, Switzerland, Thailand, Bolivarian Republic of Venezuela, Viet Nam.

<sup>4</sup> <http://www.cites.org/eng/resources/reference.php#phyto>

responses to the questionnaire illustrate that some Parties that issue phytosanitary certificates as certificates of artificial propagation for live plants, do not report on this trade, although the reasons for this lack of reporting are unclear, as CITES provisions require that such trade is reported.

**Q1. Do annual reports of your country include data on trade in artificially propagated plants of species in Appendix II?**

Of the 24 questionnaire respondents, one Party reported that they did not include trade data for artificially propagated plants of species in Appendix II within their annual reports and another two Parties indicated that they did not include data in their annual report where a phytosanitary certificate was used as a certificate of artificial propagation, but did include data where CITES permits were used. The remaining 21 Parties do report on such trade within their annual reports. With the exception of the one Party that reportedly did not include trade data for artificially propagated plants of species in Appendix II within its annual reports, all of the remaining respondents had reported on such trade in the years 2006-2010 according to the CITES Trade Database.

**3. Reporting practice (permits)**

Parties were asked to indicate the completeness of reporting on trade in artificially propagated Appendix II plants. Data from the CITES Trade Database were also analysed to obtain a further indication of the completeness of reporting.

**Q2. If you answered “YES” to question one, please select how the trade is reported within annual reports?**

- a) Each individual permit is recorded**
- b) The report contains a summary of permits issued**
- c) Trade is reported in another way**

In response to question 2, 83% of responding Parties indicated that their current reporting practice is to include details of each individual permit within annual reports. Of these 20 Parties, all indicated that their reports include details of the CITES Appendix, species, purpose of the transaction, quantity, and country of import and export/re-export for individual transactions. Nineteen Parties indicated that they include permit numbers in their annual reports and eighteen parties that they include a source code.

Sixteen of the 20 Parties indicated that the type of specimen is included for artificially propagated plants listed in Appendix II. However, the Bolivarian Republic of Venezuela reported that the term code (e.g. LIV for live) is not used; rather a full description is provided (e.g. “live plants”). Such descriptions are converted to term codes when incorporated into the CITES Trade Database.

Three Parties reported that trade in Appendix II artificially propagated plants is summarised within their annual reports. One Party noted that total exports are summed and the number of permits is not provided, although, for re-exports (of which few are recorded), full permit details are provided. Another Party indicated that although a summary was provided, information on scientific names, type of specimen, quantity, source, and the countries of origin, export and import are included in the report.

The United States provided details of its reporting practice, which has been in place since 1994, to reduce the total number of plant data records that are entered annually. Records are included within annual reports for cleared shipments of artificially propagated Appendix II plants at the same taxonomic level that the taxa are listed in the CITES Appendices. For example, 15 artificially propagated *Dendrobium macrophyllum* orchid specimens and 10 artificially propagated *Laelia purpurata* orchid specimens are recorded by the United States as 25 Orchidaceae specimens, since these species are included in Appendix II at the family level (Orchidaceae).

However, the United States still reports on a shipment-by-shipment basis, with the details submitted for each record including: the date of transaction; CITES Appendix; codes for countries of origin, export, and import; quantity (quantity actually traded, not quantity permitted); unit of measure code; type of specimen (term) code; purpose of transaction code source code; permit number; and status (cleared or seized).

Permits endorsed by United States inspecting officials for the import into, and export or re-export from the United States, of CITES plant specimens during the five most recent years are retained on file at the offices of the United States CITES Management Authority and can be referred to if there are requests for species-specific information on cleared shipments of artificially propagated Appendix II plants.

According to the CITES Trade Database, in the period 2001-2010, the United States was the second largest importer of artificially propagated plants listed in Appendix II (accounting for 26% of all imports according to importer-reported data). The disparity between the taxonomic level of reporting by the United States and that of its trading partners is illustrated in Figure 4. It is possible that other countries of import may report at higher taxonomic levels on the same basis.

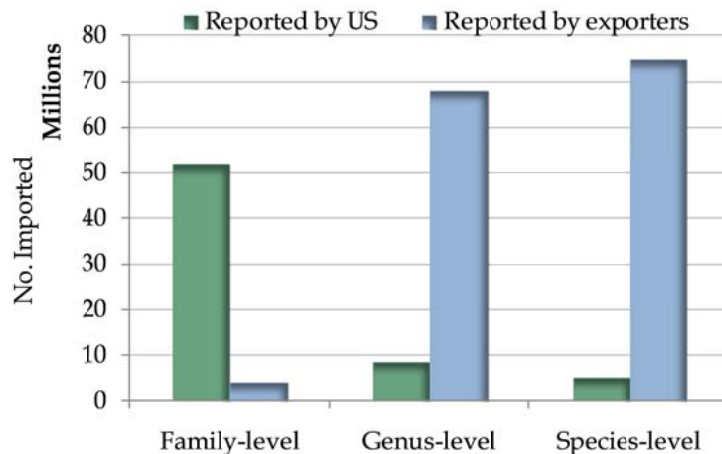


Figure 4. Taxonomic level of reporting imports of live, Appendix II-listed artificially propagated plants (excluding hybrids) by the United States and its trading partners, 2001-2010, by shipment.

#### *Data within the CITES Trade Database*

The completeness of annual reporting was determined by referring to the data within the CITES Trade Database. However, the proportion of artificially propagated specimens might be underestimated because the source is not always indicated. By definition, all trade reported as artificially propagated within the database has an allocated source code ("A".)

For the period 2006-2010, a small proportion of trade in artificially propagated plants listed in Appendix II was reported without a purpose code: 3% of shipments reported by countries of export, and 2% of shipments reported by importers. This trade reported without a purpose

code predominantly involved live plants (35,684,826 and 3,292,734 kg) and leaves (23,771,160) as well as plant derivatives including powder (53,345 kg), stems (8640 kg) and dried plants (7913 kg) as reported by countries of export. The main Parties that appeared not to report consistently on purpose codes for trade in artificially propagated Appendix II plants 2006-2010 were Costa Rica, Honduras and Thailand

In some cases, the country of destination of exports was not reported. In 0.6% of shipments reported by countries of export the importing country was not specified. Seventeen countries of export reported shipments missing this information; 42% of these were reported by Ecuador, 37% by Canada and 12% by China. In all the 2,497 shipments reported without the importing country, the type of specimen was provided; in 4% of the shipments, no purpose code was provided.

#### 4. Taxonomic level of reporting

Differences in the taxonomic level of reporting appear to represent the major difference in how Parties report on trade in artificially propagated plants listed in Appendix II. Differences in the taxonomic level of reporting are, in part, due to the reporting guidelines for plants as defined in the *Guidelines for the preparation and submission of CITES annual reports*, which specify that trade should be reported at the species level but that, where this is not possible, trade can be reported at the generic level for taxa included in the CITES Appendices by family, or where the specimens are artificially propagated Appendix II orchid hybrids.

Individual Parties frequently reported at both the species and genus level during the five years 2006-2010. The majority of shipments were reported at the species level (88%, as reported by countries of export) (Figure 4a). Trade was also reported at the family level both by countries of export and countries of import (approximately 22,409 and 72,702 shipments, respectively, 2006-2010), although the guidelines do not indicate that reporting at the family level is acceptable.

The level of taxonomic reporting differs between countries of export and countries of import with the latter tending to report trade at a higher taxonomic level than countries of export for corresponding trade (Figure 4b). Countries of import reported almost a fifth of all trade at the family level.

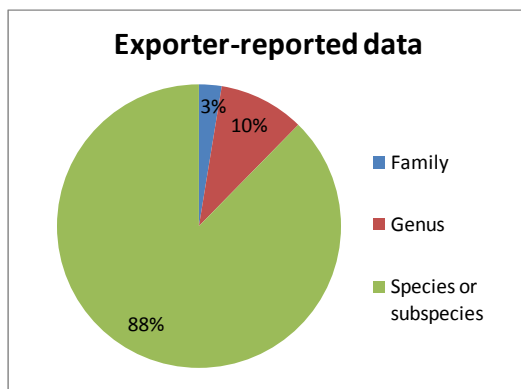


Figure 4a. The proportion of shipments of non hybrid taxa that were reported at each taxonomic level by countries of export, 2006-2010.

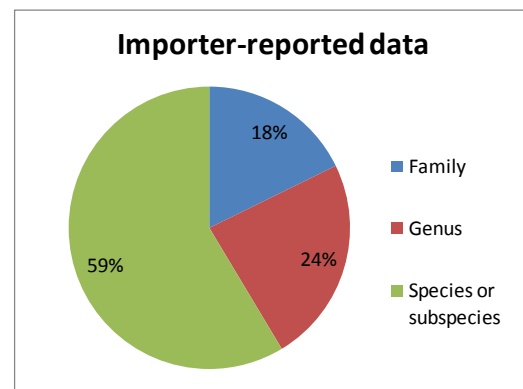


Figure 4b. The proportion of shipments of non-hybrid taxa that were reported at each taxonomic level by countries of import, 2006-2010.

Plant taxa included in the Appendices at the family level (Cactaceae, Cycadaceae, Didiereaceae, Orchidaceae, Stangeriaceae and Zamiaceae) may be reported at the genus level, according to the guidelines, as may orchid hybrids. Of the trade in Appendix II artificially propagated plants recorded at the genus level (2006-2010), the majority (72% of shipments according to data reported by countries of import) was in taxa listed at the family level, with a further 10% represented by orchid hybrids (Figure 5). The remaining 18% of shipments reported at the genus level, were neither taxa listed at the family level nor orchid hybrids. Further information on the practice of Parties with regard to the taxonomic level of reporting is available from question 3 of the questionnaire.

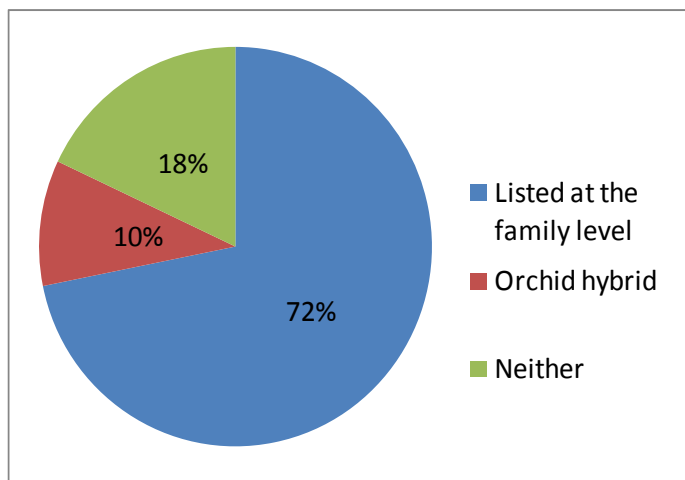


Figure 5. Characteristics of trade in Appendix II-listed artificially propagated plants recorded at the genus level 2006-2010, as reported by countries of import, by number of shipments.

**Q3. Please select one of the options below, to indicate at which taxonomic level you report the trade (Species level; Genus level; Family level; It varies). If it varies, on what basis do you determine the appropriate level?**

Three quarters of respondents indicated that they report on trade in artificially propagated Appendix II plants at the species level, which broadly corresponds to the results obtained from the CITES Trade Database (Figures 5a and 5b). However, even where Parties did generally report at the species level, there may be exceptions. For example, Belgium reports at the species level for all imports except orchids, and at the genus level for exports (specifically noting the genera *Tillandsia*, *Pachypodium*, *Aloe*, *Nepenthes*, and *Cyclamen*, as well as cacti and orchids more generally). Kuwait and Switzerland report at the species and genus levels; Switzerland noted that reporting at higher taxonomic levels is rare.

Six Parties indicated that the taxonomic level of reporting varies, such as the United States approach outlined above. Greece reports on taxa according to the taxonomic listings within the legislation implementing CITES within the European Union<sup>5</sup>. France sometimes reports at the family level for orchids and, more rarely, for cacti. China noted that reporting is generally

<sup>5</sup> Council Regulation (EC) No. 338/97 and Commission Regulation (EC) No. 865/2006 as amended by EC Commission Regulation (EC) No. 100/2008 and Annexes contained within Commission Regulation (EC) No. 100/2008.

at the species level, although genus level may be used where identification of specimens is not possible.

Australia indicated that, whilst trade is reported at the species level on single use permits for the import or export of artificially propagated plants (other than hybrids), multiple use permits are issued using the lowest taxonomic level possible. However, exporters with a multiple use export permit must use a Specimen Export Record for exports, and report to the species level.

According to the CITES Trade Database, a high proportion (23%) of the trade in specimens of live artificially propagated Appendix II plants was from hybrids, as reported by exporters 2006-2010. Parties were asked to provide details of their reporting practice for hybrid taxa in question 4 of the questionnaire.

**Q4. Concerning trade in hybrids, please select one or more of the options below to indicate how the trade is reported:**

- The parent species of hybrids are specified
- Reporting is at the higher taxon level and “hybrid” is specified for Orchids only
- Reporting is at the higher taxon level and “hybrid” is specified for all taxonomic groups
- Other (please specify)

According to the 24 respondents, Parties differed in their reporting practice concerning trade in hybrids, although individual Parties may not follow a consistent approach. Three Parties indicated that, in some cases, trade is reported at the higher taxon level and “hybrid” is specified (e.g. *Encyclia* spp.) but, in other cases, reporting may include both parent species (e.g. *Encyclia alata* x *Encyclia tampensis*). Three Parties noted that they reported trade in hybrids at higher taxon levels for all taxonomic groups (rather than only orchids). One Party noted that it reported import trade in orchid hybrids according to the taxonomic level on the export permit, and this usually refers to the genus.

Use of a single consistent approach was reported by 18 Parties and details are summarised in Figure 6.

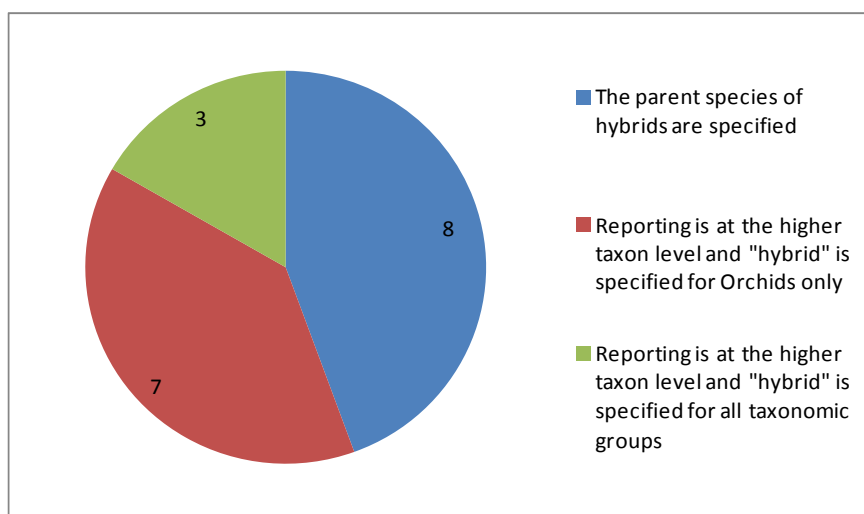


Figure 6. Parties' reporting practice for hybrid plant specimens.

The United States reports hybrids of artificially propagated Appendix II species at the level of genus or family, dependent on the listing in the Appendices. Whilst, two Parties in their response to question 3 noted that all hybrids were reported at the genus level.

According to data provided in annual reports, Parties report either the parent species of the hybrid (e.g. *Encyclia alata* x *Encyclia tampensis*), or the parent genus/genera (e.g. *Brassavola* x *Cattleya* hybrid) or the family (e.g. Orchidaceae hybrid). Alternatively, Parties sometimes report on a 'scientific' name of an intergeneric hybrid (e.g. *Brassocattleya* refers to a hybrid between the genera *Brassavola* and *Cattleya*), or the trading name (e.g. *Cattleya* 'Christmas Rose').

Regardless of how they are reported, all electronic records of trade in hybrids are entered into the CITES Trade Database at the taxonomic level common to the parent taxa specified in the report (either the genus level for an intra-generic hybrid, or the family level for an inter-generic hybrid), e.g. '*Cattleya* hybrid' or 'Orchidaceae hybrid'.



## Summary of current reporting practices

Parties' current reporting practices for trade in artificially propagated plants listed in Appendix II are summarized in Table 4. It is clear that Parties have not consistently followed the recommendations of the Conference of the Parties.

As recognised in Resolution Conf. 11.17 (Rev. CoP14), annual and biennial reports are the only available means of monitoring the implementation of the Convention and the level of international trade in specimens of CITES species. Whilst Parties may issue phytosanitary certificates as export permits in accordance with Resolution Conf. 12.3 (Rev. CoP15), not all provide details of such exports in their annual reports in accordance with the requirements of the Convention (Article VIII).

Table 4. Summary of Parties' current reporting practices for trade in artificially propagated plants listed in Appendix II.

	<b>Reporting in accordance with reporting guidelines</b>	<b>Reporting not in accordance with reporting guidelines</b>
Formats	Electronic format annual reports are now (2006-2010) submitted by the majority of Parties reporting on trade in artificially propagated specimens of Appendix II taxa, so this data will be included in the CITES Trade database.	Hard copy format annual reports were submitted by only a few Parties that reported on trade in artificially propagated specimens of Appendix II taxa in the period 2006-2010.
Issuance of documents	Ten Parties and Territories have notified the Secretariat that they use phytosanitary certificates as certificates of artificial propagation for taxa included in Appendix II and include the trade data in their annual reports.	Two Parties reported in their questionnaire responses that they issue phytosanitary certificates as certificates of artificial propagation for taxa included in Appendix II but do not include the trade data in their annual reports (8% of respondents).
Taxonomic level	Fifty four percent of questionnaire respondents indicated that they only report trade in artificially propagated specimens of taxa included in Appendix II at the species level.	Thirty six percent of questionnaire responses indicate that questionnaire respondents vary the taxonomic level of reporting depending on factors such as: whether the taxa in question is listed at the Family level and CITES guidance indicates that genus level reporting is acceptable; or taxa listed at the Family level may also be reported at Family level.
Hybrids	Forty six percent of questionnaire respondents indicate that they report by specifying parent species; 33% report at genus level for orchid hybrids)	Twenty-five per cent of questionnaire respondents report at genus level for all hybrids of artificially propagated specimens of taxa included in Appendix II (NB some Parties reported multiple reporting practices).

Details of exports that have been authorised by issuance of a phytosanitary certificate rather than an export permit can be added to the CITES Trade Database if provided electronically in the usual way.

The questionnaire provided Parties with an opportunity to provide feedback on the current reporting requirements, which are summarised below.

**Please provide any other relevant comments on reporting of artificially propagated plants of species in CITES Appendix II.**

A number of Parties made observations on the reporting of Appendix II artificially propagated plants. Switzerland noted that 20% of all its reporting concerns imports and exports of artificially propagated plants, and that the reporting of this trade occupies a significant resource of the Management Authority.

The United States supported the need for continued work within Decisions 14.39 (Rev. CoP15)-14.41 (Rev. CoP15) to identify a way to reduce the reporting burden on Parties that is consistent with Parties' reporting obligations under the Convention. The United States suggested that the approach they use to streamline reporting of artificially propagated Appendix II plant specimens be adopted more widely. They noted that they "have found through experience that this streamlined reporting method has not hindered our ability to use our annual report data to detect illegal trade or to perform other analyses related to the conservation of wild CITES-listed plants".

China felt that there was merit in further discussion of the appropriate taxonomic level for reporting of artificially propagated Appendix II plants, in particular when the entire genus is listed in Appendix II, whether it is necessary to report at the species level.

Germany commented that the reporting of scientific names on export permits, especially for orchids, often did not correspond to CITES accepted nomenclature, and where the Conference of the Parties has not adopted a standard for some taxonomic groups this creates additional work for CITES Authorities. Whilst this problem may not be restricted to artificially propagated plants, it is clear that the standard nomenclatures adopted by the Convention are not always followed (e.g. in relation to hybrids as described above).

Of the correspondence received by UNEP-WCMC from Parties concerning annual reports submitted for the year 2010, only the United States provided any additional information on reporting practices referring specifically to artificially propagated plants listed in Appendix II as described above.

## ***Conclusions on the degree and completeness of reporting of trade in Appendix II artificially propagated plants***

- Much of the difference between trade volumes reported by countries of import and those reported by countries of export is explained by the non-reporting of exports from Taiwan province of China. observed in the trade volumes reported by the importing and exporting countries is explained by a lack of reporting, In addition, the practice, reported by a few countries, of not reporting on imports accompanied by phytosanitary certificates as certificates of artificial propagation also leads to differences in volumes reported by countries of export and import.
- Whilst many Parties follow the recommendations in the *Guidelines for the preparation and submission of annual reports*, some Parties have adopted their own reporting practices to lessen reporting burdens. Discrepancies in the taxonomic level of reporting were observed, with countries of import tending to report at a higher taxonomic level than countries of export for corresponding trade.
- Otherwise, reporting of trade in Appendix II artificially propagated plants appears to be broadly consistent with Resolution Conf. 12.3 (Rev. CoP15).
- One Party noted that the current level of detailed reporting for artificially propagated plants of taxa included in Appendix II occupies a lot of the resources of the Management Authority and one Party noted that it had adopted a streamlined reporting procedure.

## Illegal trade detection through the compilation of trade data – analysis of seizures recorded in national reports

The practice of Parties in reporting confiscation or seizure data within their national reports was examined through their questionnaire responses. The questionnaire also provided Parties with an opportunity to submit details of illegal trade that was known to have occurred in their country but that was not recorded in national reports.

Responses to question 5 are summarised below.

**Q5. Are confiscations and seizures of Appendix II artificially propagated plants reported in your:**  
-CITES annual reports or  
-CITES biennial reports?

Approximately one-third of respondents reported that confiscations/seizures of artificially propagated plants of taxa included in Appendix II are reported exclusively within biennial reports, with 20% indicating that the data were included in their annual reports (Figure 7). Whilst five Parties used both types of reports (and therefore appear to report on seizures/confiscations twice), two Parties did not report on seizures/confiscations at all.

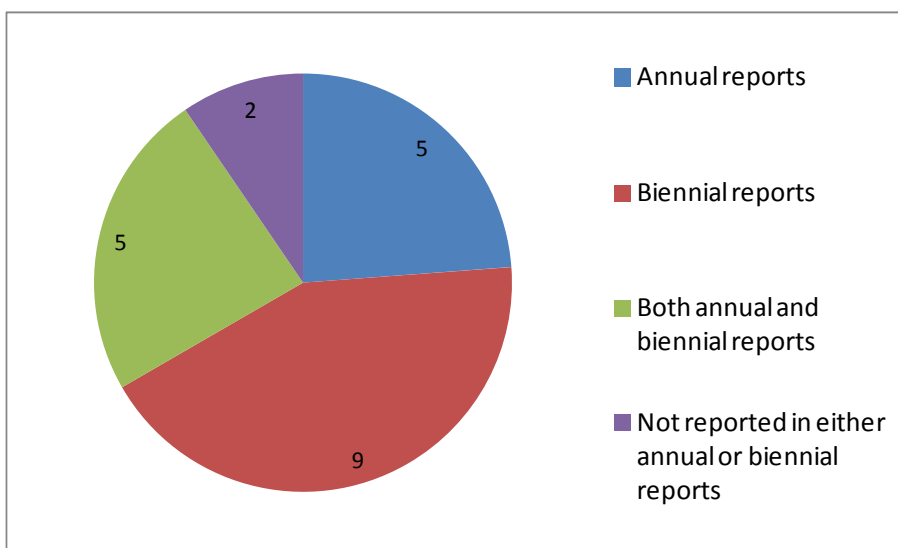


Figure 7. Parties reporting practice for seizures/confiscations of Appendix II artificially propagated plants.

Mexico indicated that details of confiscations/seizures are included within both annual and biennial reports, provided that they could be made public in accordance with national legislation. Greece indicated that all confiscations/seizures would normally be included within biennial reports; however, as no seizures/ confiscations (presumably of artificially propagated Appendix II plants) had yet been made, none had been reported on.

Responses to question 6 are summarised below.

**Q6. Can you provide any additional details of known illegal trade in artificially propagated plants that has not already been reported through annual or biennial reports?**

Six respondents provided additional details on illegal trade in artificially propagated plants. The United Kingdom raised concerns that plants within international trade have been described as artificially propagated where they are in fact wild-collected (i.e. misdeclared). It was noted this was particularly true for certain plant groups where new species are entering into trade such as orchids and *Nepenthes* spp. (tropical pitcher plants).

Australia noted that parts and derivatives of plant species used in many complementary and traditional medicines are assumed to be artificially propagated. Two main enforcement problems were identified by Australia. Firstly, plant derivatives such as powders may not be labelled on packaging (either intentionally or inadvertently) and therefore may not trigger seizures at the border. Secondly, seizure data may not accurately reflect the species contained within tablets/pills as these may be derived from multiple CITES species.

One Management Authority suspected that there was a small scale illegal trade in artificially propagated plants by retailers through the internet and postal trade (mainly within the European Union) and was working to tackle this through education. Mexico noted that there had been no known cases of illegal trade in artificially propagated Appendix II plants over the period 2005 to 2012.

The United States noted that, for seized shipments of artificially propagated Appendix II plants, they report seizures at the most specific taxonomic level available; usually the species or subspecies or parental cross level for hybrids.

***Analysis of national reports***

An analysis of data within CITES annual and biennial reports was undertaken to determine whether any illegal trade characteristics could be identified such as trends within taxonomic groups or high risk geographic areas.

Within annual reports, data on confiscations/seizures tend to be quantitative, with Parties providing details of the species identified to the lowest taxonomic level possible, country of origin, quantity and purpose where known. Parties report on seizures in their annual reports using source code “I”. However, it must be noted that this source code is inconsistently used. Some Parties use source code “I” to record attempted imports of specimens that have been seized at the national borders. Other Parties appear to use source code “I” only for specimens that have been confiscated or seized and are being legally re-exported back to the country of export or origin.

Biennial reports include information on “*significant seizures, confiscations and forfeitures of CITES specimens*” and the data provided tend to be qualitative. As there is no current definition on what a “significant” seizure may be, information provided is unlikely to be comprehensive, and may therefore under-represent the scale of seizures by Parties. Where quantitative data were provided, this was analysed to determine which taxa were more

prevalent in illegal trade. However, some data had to be converted to higher taxonomic levels as Parties had provided one quantity to cover a number of different genera.

## ***Annual reports***

According to the data submitted by Parties within their annual reports for the period 2006-2010, seizures of Appendix II plants (reported as source code “I”) comprised mainly live plants. Additional seized items included dried plants, seeds, leaves, roots and stems, as well as medicines, extract, powder, oil and derivatives. Whilst derivatives from trees grown in monospecific plantations may be considered as artificially propagated in accordance with the definition in Res. Conf. 11.11 (Rev. CoP15), such plant material is less likely to have been derived from artificially propagated production methods and no further consideration is given to timber-related parts/derivatives (carvings, chips, timber, plywood, sawn wood and veneer) in this section.

### **Live plants**

Countries of import reported 94,468 live plants as well as 0.46 kg of live plants confiscated/seized, representing 491 taxa over the five year period 2006-2010. There were very low levels of seizures for the vast majority of these taxa, with specimens of 442 taxa seized in quantities of less than 100 specimens over the five years. Data on the 10 taxa reported as confiscated or seized during 2006-2010 by countries of import in the greatest numbers are presented in Table 5. All other taxa were reported as confiscated/seized in quantities below 1,000 live plants. The proportion of artificially propagated and wild plants in legal trade for these taxa is provided.

A large number of live plants seizures could not be identified to species level and were reported either at the genus or family level. Live Appendix II plants of the family Orchidaceae were seized in highest quantities (79%), followed by Cactaceae (6%), Droseraceae (5%) and Euphorbiaceae (3%). Reflecting the most highly traded genus in trade 2006-2010, 42% of all seizures of live Appendix II plants were reported as *Phalaenopsis* spp. or *Phalaenopsis* hybrid. Seizures/confiscations reported at the family level (Orchidaceae spp. and Cactaceae spp.) accounted for a higher proportion of illegal trade compared to legal trade (Table 3). The seizure of live plant specimens reported in kilograms represented a single species, *Panax quinquefolius*.

Live Appendix II plants were seized from 54 countries of export, with the highest number of seizures reported exported from Parties or territories within Asia: Taiwan, Province of China (25,726), Thailand (23,339) and Indonesia (18,590). According to countries of import, over 70% of all live Appendix II plant seizures originated from these three countries or territories. However, 99.9% of live Appendix II plants legally exported from both Thailand and Indonesia were artificially propagated as opposed to wild-sourced (as reported by countries of export, 2006-2010). The countries of origin of seizures broadly correspond to the main exporting Parties for live plants.

Only 13 countries of import reported seizures of live Appendix II plants, with ten of these being located within the European Union. The United States reported the vast majority of seizures of live plants, as reported by importers (92%).

Imports of live Appendix II plants that were reported seized were predominately for commercial purposes (90%); no purpose code was recorded for the specimens reported seized in kilograms.

Table 5. The ten Appendix II plant taxa reported confiscated/seized as live plants in the greatest numbers, 2006-2010 (reported by importers).

Taxon	Quantity seized	Proportion of total confiscated /seized	Quantity in legal trade	Proportion of total in legal trade	Proportion of wild-sourced and artificially propagated live plants in legal trade	
					Artificially propagated	Wild
<i>Phalaenopsis</i> spp. (Orchid)	38454	40.7%	19,991,090	17.8%	99.7% (63 species plus <i>Phalaenopsis</i> spp.)	0.3%
<i>Dendrobium</i> hybrid (Orchid)	19740	20.9%	3,715,127	3.3%	100% 5 specific hybrids plus <i>Dendrobium</i> spp.	0%
<i>Dionaea muscipula</i> (Venus flytrap)	4990	5.3%	4,053,509	3.6%	100%	0%
<i>Cattleya</i> hybrid (Orchid)	3014	3.2%	176,816	0.2%	100%	0%
<i>Euphorbia</i> spp.	2857	3.0%	3,212,845	2.9%	99.7% (275 species or subspecies)	0.3%
Cactaceae spp. (Cacti)	2528	2.7%	17,122,608	15.3%	Virtually 100%	<0.01 %
Orchidaceae spp. (Orchid)	2252	2.4%	41,822,233	37.3%	Virtually 100%	<0.01 %
<i>Phalaenopsis</i> hybrid (Orchid)	1450	1.5%	20,876,991	18.6%	100% (5 specific hybrids plus <i>Phalaenopsis</i> hybrid)	0%
<i>Pleione</i> spp. (Orchid)	1312	1.4%	3,892	<0.01%	100% (13 species plus <i>Pleione</i> spp.)	0%
<i>Oncidium</i> spp. (Orchid)	1233	1.3%	1,076,723	1.0%	Virtually 100% (196 species plus <i>Pleione</i> spp.)	<0.01 %

Countries of export reported 281 live plants under source code “I”; the majority (261) were exported by Ecuador for the purpose of law enforcement/judicial/forensic.

### Other derivatives

In terms of plant stems, orchids were again the main taxonomic group seized, with 137 kg of *Dendrobium* spp. and 53 kg of Orchidaceae spp. reported seized 2006-2010 by countries of import. The majority of seizures of orchid stems originated from China (119 kg *Dendrobium* spp. and 21 kg Orchidaceae spp.). *Aloe ferox* stems were seized in lower numbers (1911 stems), all originating in South Africa. In contrast to orchids, international trade in *A. ferox* stems is predominantly in specimens that were wild-sourced rather than produced through artificial propagation. All of the plant stem seizures were reported by New Zealand, the United States and Germany.

A total of 171.5 kilograms of dried plants as well as 474 individual dried plants were reported seized/confiscated by seven countries of import during 2006-2010. Of those, the highest

quantities of seizures (74 kg) were reported for orchids identified to the family level, Orchidaceae, as well as *Panax quinquefolius* (American ginseng) (26.5 kg), *Aloe* spp. (24 kg) and *Cibotium barometz* (18.5 kg). Individual dried plants seized comprised *Hoodia* spp. (180), Cactaceae spp. (46), Orchidaceae spp. (46) and *Panax quinquefolius* (40), as well as very low numbers of 57 other taxa. Legal trade reported in 2006-2010 for *Panax quinquefolius* was in both wild specimens (with origins in the United States, Canada or unknown), and specimens produced by artificial propagation.

According to countries of import, China, including its Special Administrative Region of Hong Kong was the main country of export for seized dried plants with 83 kg from China and 27 kg from Hong Kong S.A.R. A further 24kg was seized from unknown countries.

Three quarters of all seized plant roots reported in kilograms comprised the species *Panax quinquefolius* (2888 kg seized), with possibly only two other significant taxa; *Cibotium barometz* (570 kg) and species of the genus *Gastrodia* (155 kg). Reported seizures of seeds comprised mainly the species *Beccariophoenix madagascariensis* (4 kg), as well as *Cypripedium calceolus* (0.5 kg and 1000 seeds), and smaller numbers of additional species including *Piperia unalascensis* and Zamiaceae spp.

Trade data for seizures of other derivatives (powder, extract, medicine and oil), which are usually reported in weight (kg), were combined to allow for a more meaningful analysis. The ten taxa reported as seized/confiscated in the greatest weight for these trade terms is provided in Table 6.

Table 6. The ten Appendix II plant taxa reported confiscated/seized as derivatives in the greatest weight, 2006-2010 (reported by countries of import, in kg).

Taxon	Quantity reported seized/confiscated (kg)	Main trade term
<i>Aloe ferox</i>	20267	Extract
<i>Gastrodia elata</i>	16780	Derivatives
<i>Hoodia</i> spp.	10946	Powder
<i>Aquilaria filaria</i>	9000	Powder
<i>Pterocarpus santalinus</i>	5000	Powder
<i>Aquilaria malaccensis</i>	3708	Powder
<i>Aloe arborescens</i>	2380	Extract
<i>Bletilla</i> spp.	2184	Powder
<i>Cistanche deserticola</i>	1886	Derivatives
<i>Flickingeria macraei</i>	1881	Derivatives

The United Kingdom seized virtually all of the *Aloe ferox* specimens; these originated from South Africa, a range State for the species. The legal trade in *A. ferox* comprises specimens sourced from both the wild and artificial propagation. *Gastrodia elata* was seized predominantly by the United States from The Republic of Korea, all legal trade reported in the CITES Trade Database for this species 2006-2010 was in artificially propagated specimens.

The majority of specimens of *Hoodia* spp. (10800 kg) was seized by the United States and (re-)exported from the United Kingdom. Saudi Arabia reported the seizure of 9000 kg of *Aquilaria filaria* (all powder) and 5000 kg of *Pterocarpus santalinus* from Indonesia and India, respectively, both of which are range States for these respective species.



## Biennial reports

Of the 67 biennial reports received for the reporting period 2007-2008, 13 Parties or territories<sup>6</sup> reported on confiscations/seizures of plant taxa. Many Parties indicated that significant seizures had been made, but did not provide full details, or the details referred to in the report (e.g. as an attachment) could not be located. Seizure data within biennial reports frequently did not indicate the country of export, although this could in some cases be unknown.

Live plants were the main specimens reported on as “significant seizures”, with 17,666 live plants seizures during 2007-2008. In contrast to data held within annual reports, the seizure data reported in biennial reports suggest that specimens in illegal trade 2007-2008 were principally of the family Cactaceae (Figure 8). Three quarters of these seizures (76%) were reported at the family level. The main taxa reportedly seized as live plants and reported at the genus/species level in 2007-2008 biennial reports were *Cycas revoluta* (3080), *Frailea* spp. (610), and *Ariocarpus* spp. (115); all of which are within the family Cactaceae.

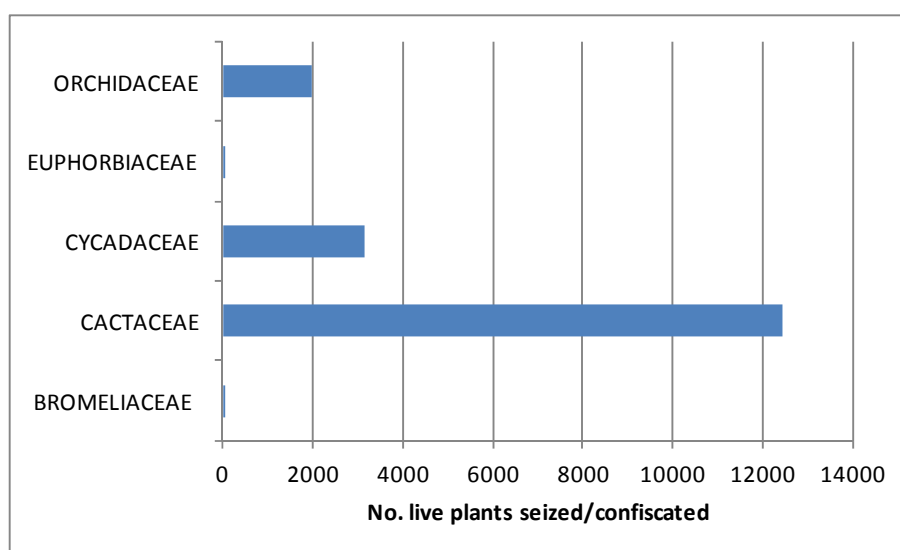


Figure 8. Number of live plants seized/confiscated, by family, as reported in CITES biennial reports 2007-2008.

Other reported seizures in biennial reports included 14370 medicines, all of which comprised *Hoodia* spp. and *Saussurea costus*, 19467 pills, 92% of which were *Hoodia* spp., and 5605 derivatives, mainly comprising *Prunus africana*. More than 6000 “pieces” of *Hoodia* spp. were also reported on.

## Review of existence/extent of illegal trade in artificially propagated plants

Literature pertaining to the existence and extent of illegal trade in artificially propagated plants was found to be generally scarce. There is an obvious risk that wild-collected and

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<sup>6</sup> Argentina, Austria, Germany, Ireland, Kuwait, Latvia, Macao, Netherlands, Peru, Portugal, Slovenia, Spain and Sweden.

artificially propagated specimens could be combined in the same shipment in order to smuggle wild specimens. Several reports of illegal trade referred to wild-collected specimens being falsely reported as artificially propagated (Jenkins & Oldfield 1992, Hemley 1994, Oldfield 1997, Holden 1998, CITES 2002, TRAFFIC 2008a, TRAFFIC 2009).

Oldfield (1997) reported that a shipment of 1491 Cactaceae spp. exported from Peru were claimed to be artificially propagated, however, further investigation revealed more than 90% of the specimens were found to be wild-collected. Similar cases involved large quantities of specimens of *Pachypodium brevicaule* originating in Madagascar and imported to Germany in 1985 and 1986 (Jenkins & Oldfield 1992), and shipments of orchids imported by Germany from Taiwan (Province of China) in 2001. In the latter case, the shipment reported to be artificially propagated was found to contain 141 specimens of a rare species of the genus *Dendrobium* and 57 specimens of *Paphiopedilum* spp. all of which were wild-sourced (CITES 2002).

Literature consulted provided a number of other examples of illegal trade, which appeared to be most prevalent in two families: Orchidaceae spp. and Cactaceae spp. (see Table 7).

Table 7. Reports of illegal trade from literature searches.

Taxon	Report of illegal trade	Reference
Orchidaceae spp.	78 wild taken Appendix I specimens, 26 Appendix II specimens smuggled in luggage from Viet Nam to Germany. October 2001.	CITES (2002)
Cactaceae spp. including <i>Ariocarpus</i> , <i>Astrophytum</i> , <i>Aztekium</i> , <i>Echinocereus</i> , <i>Obregonia</i> , <i>Pelecypora</i> , <i>Strombocactus</i> and <i>Turbinicarpus</i>	927 wild-collected live specimens of 18 Cactaceae species endemic to Mexico seized at Schiphol Airport, Amsterdam, Netherlands in March 2000	CITES (2002)
Orchidaceae spp. including <i>Dichaea</i> , <i>Epidendrum</i> , <i>Leptotes</i> , <i>Lycaste</i> , <i>Masdevallia</i> , <i>Maxillaria</i> , <i>Oncidium</i> , <i>Pleurothallis</i> , <i>Psychmorchis</i> , <i>Stelis</i> and <i>Telipogon</i>	310 Appendix II wild-collected specimens of Orchidaceae spp. were seized at Zaventum Airport, Belgium in a shipment from Costa Rica in 2001.	TRAFFIC (2001)
Orchidaceae spp. majority of specimens <i>Cymbidium</i> and <i>Phalaenopsis</i>	25 seizures of Orchidaceae spp. were carried out at Customs checkpoints in Hong Kong, SAR (China) in 2003. 18 seizures occurred on the border with mainland China, 7 took place at the Hong Kong-Macau and Hong Kong-China ferry terminals.	TRAFFIC (2003)

Large inconsistencies between the number of permits issued and the number of specimens of the family Cactaceae exported from Mexico have been noted; more than 500,000 Saguaro cactus ribs (*Carnegiea gigantea*) were exported from Mexico without a permit (Búrquez 2008). It has also been suggested that the illegal trade in extract from *Aloe ferox* from South Africa could also be substantial (Knapp 2006). Newton and Vaughan (1996) reported an undocumented trade of 300 tonnes per annum in this species.

Illegal collection threatens a number of internationally traded orchid genera; *Aerides* spp., *Calanthe* spp., *Cymbidium* spp., *Phalaenopsis* spp., *Vanda* spp. and *Dendrobium* spp. in Viet

Nam (CITES 2004), *Dendrobium scabrilingue* in Thailand (Sarathum *et al.* 2010), and *Phalaenopsis* spp., *Bulbophyllum reticulatum* and *Dossinia marmorata* in Malaysia (Rusea *et al.* 2009).

Schuiteman *et al.* (2008) highlighted the problem of the illegal trade in orchids from Lao People's Democratic Republic (Lao PDR) to collectors in Thailand; two species endemic to Lao PDR (*Dendrobium lamyiae* and *Coelogyne sudora*) were first discovered in nurseries in Thailand. The extent of illegal trade of *Dendrobium* spp. was illustrated by a report of over 100,000 kg of dried, wild-collected stems exported illegally from the central region of Lao People's Democratic Republic to China for use in the Chinese medicine industry in one year (date not specified) (Schuiteman *et al.*, 2008).

A search of information on seizures and prosecutions relating to plant species in the TRAFFIC Bulletin indicates that *Dendrobium* spp. feature highly in illegal trade, commonly as ingredients for medicinal products (TRAFFIC 2008b, TRAFFIC 2010) or as whole plants (dried or live) (TRAFFIC 2006, TRAFFIC 2008c). Singapore seized 83 wild-sourced orchids belonging to 24 species including *Dendrobium brymerianum*, *D. pachyphyllum*, *D. secundum*, *Trias picta*, and *Vanda testacea* from Thailand which were not accompanied by a CITES export permit (TRAFFIC 2006).

A number of seizures related to the confiscation of diet pill shipments containing *Hoodia* spp. as an ingredient (TRAFFIC 2007, TRAFFIC 2008c). Seizures of Cactaceae spp. were also reported with 62 live Cactaceae spp. specimens seized at Zaventem Airport in Brussels, including *Coryphantha* spp., *Lophophora williamsii*, *Mammillaria* spp., and *Matucana* spp. (TRAFFIC 2000a). The illegal collection and import of cycads also featured in reports of confiscations and seizures (TRAFFIC 2001).

A small number of seizures recorded in the TRAFFIC Bulletin related to the illegal trade in *Galanthus* spp., with 75,000 *Galanthus* plants and 2000 specimens of *Galanthus woronowii* seized in the Russian Federation in 2003 (TRAFFIC 2003). Several reports highlighted the illegal trade in American ginseng (*Panax quinquefolius*) as a medicinal ingredient (TRAFFIC 2004, TRAFFIC 2008c, TRAFFIC 2010) or as roots (TRAFFIC 2008b). A number of seizures included Costus root (*Saussurea costus*) (TRAFFIC 1999, TRAFFIC 2000a, TRAFFIC 2008b). In the United Kingdom, a shipment of 4,500 *Cyclamen* spp. bulbs from Iran was seized due to absence of the necessary permit (TRAFFIC 2000b).

## Analysis of trade trends

An analysis of trade in artificially propagated plants listed in Appendix II (excluding timber) for the ten years 2001-2010 is summarised below, to identify: shifts in source code, emerging trade in artificially propagated plants, and trade where the country of export is not a range State. The analysis concerns trade specifically reported without a unit (e.g. number of individual live plants, flowers, leaves etc.) unless otherwise stated (e.g. trade was reported by weight).

### Shifts in source code

Nine genera were traded in high volumes as both artificially propagated and wild-sourced specimens between 2001 and 2010 (>10,000 live plants from each source, according to importer-reported data). In four of these genera (*Dendrobium*, *Euphorbia*, *Zamia* and *Nepenthes*), wild-sourced trade comprised less than 2% of total imports of live plants over the ten-year period.

The proportions of wild-sourced and artificially propagated trade in the other five genera between 2001 and 2010 are shown in Figures 9-18. In one of these genera (*Galanthus*) the proportion of artificially propagated specimens imported over time is fairly constant until 2009, when the quantity of wild-sourced specimens decreased substantially (Figures 9 & 10). In another two of these genera (*Cyclamen* and *Ravenea*), there is an overall increase in the quantity and proportion of artificially propagated specimens imported over time (Figures 11-14). In the remaining two genera (*Pachypodium* and *Cyathea*), there has been more fluctuation in source over time, with an overall increase in the quantity and proportion of artificially propagated specimens until 2007 and a subsequent decline 2008-2010 (Figures 17-18).

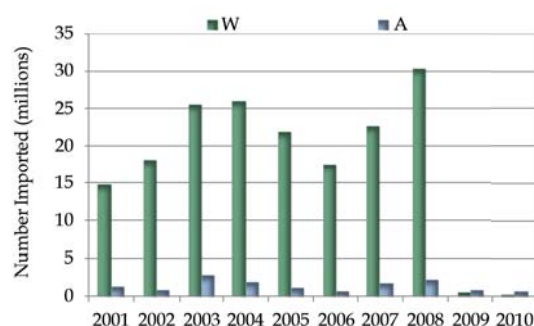


Figure 9. Number of wild-sourced ('W') and artificially propagated ('A') imports of live *Galanthus* spp., 2001-2010, as reported by importing countries.

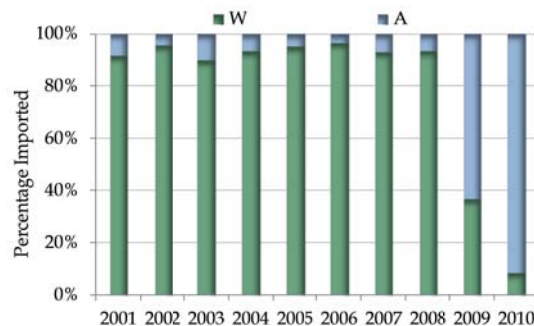


Figure 10. Proportion of wild-sourced ('W') and artificially propagated ('A') imports of live *Galanthus* spp., 2001-2010, as reported by importing countries.

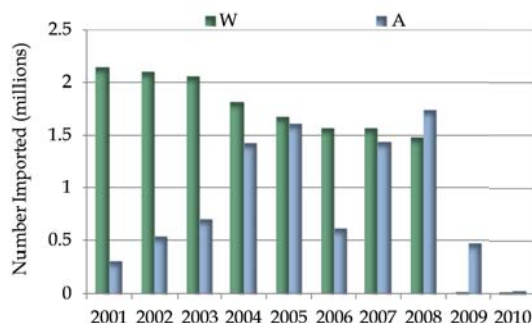


Figure 11. Number of wild-sourced ('W') and artificially propagated ('A') imports of live *Cyclamen* spp., 2001-2010, as reported by importing countries.

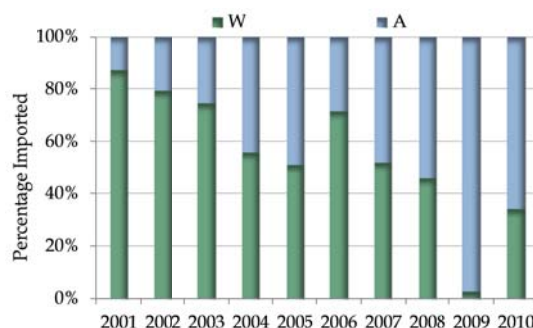


Figure 12. Proportion of wild-sourced ('W') and artificially propagated ('A') imports of live *Cyclamen* spp., 2001-2010, as reported by importing countries.

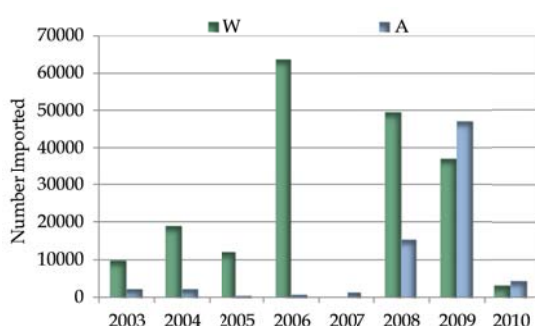


Figure 13. Number of wild-sourced ('W') and artificially propagated ('A') imports of live *Ravena* spp., 2001-2010, as reported by importing countries.

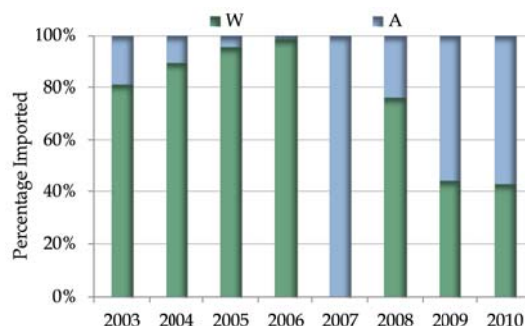


Figure 14. Proportion of wild-sourced ('W') and artificially propagated ('A') imports of live *Ravena* spp., 2001-2010, as reported by importing countries.

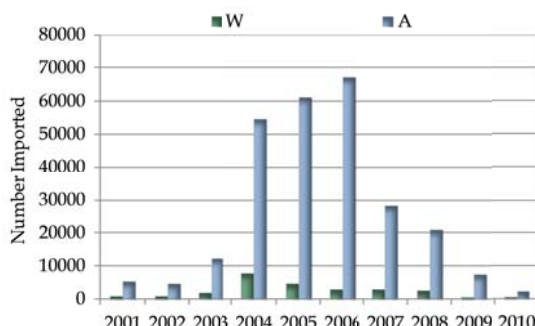


Figure 15. Number of wild-sourced ('W') and artificially propagated ('A') imports of live *Pachypodium* spp., 2001-2010, as reported by importing countries.

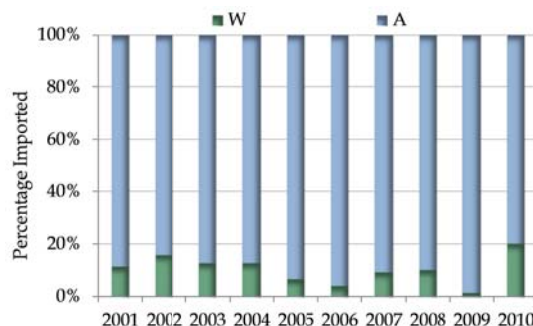


Figure 16. Proportion of wild-sourced ('W') and artificially propagated ('A') imports of live *Pachypodium* spp., 2001-2010, as reported by importing countries.

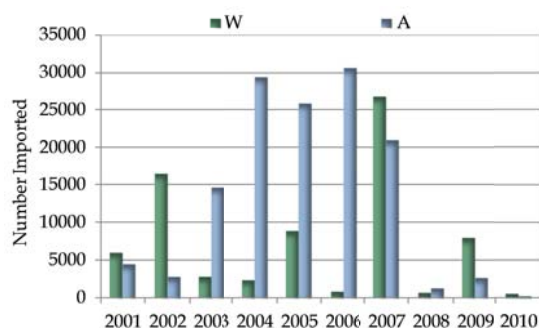


Figure 17. Number of wild-sourced ('W') and artificially propagated ('A') imports of live *Cyathea* spp., 2001-2010, as reported by importing countries.

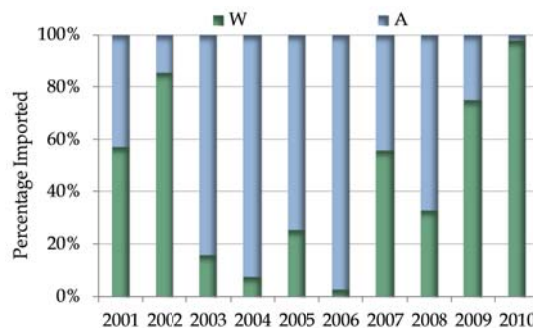


Figure 18. Proportion of wild-sourced ('W') and artificially propagated ('A') imports of live *Cyathea* spp., 2001-2010, as reported by importing countries.

#### *Emerging trade in artificially propagated plants*

Trade in artificially propagated specimens of 326 taxa appeared to be emerging, i.e. the taxon was reported at a level of 100 or more specimens (e.g. individual live plants, roots, etc.), for commercial purposes in either 2009 or 2010, and the volume reported in either 2009 or 2010 was more than three times the average trade volume for the five preceding years. Taxa for which a sharp increase in trade was identified included 32 species of *Bulbophyllum* spp., 39 species of *Dendrobium* spp., 15 *Euphorbia* spp., 10 *Nepenthes* spp., 12 *Phalaenopsis* spp., and 10 *Vanda* spp., as well as hybrids of those taxa. *Nepenthes* hybrids showed a very sharp increase in trade, with no trade reported in the period 2002-2007 and commercial exports of a total of 39,285 live specimens reported between 2008 and 2010.

A list of these taxa emerging in trade could be provided to the Plants Committee for them to assess on the basis of expert knowledge whether specimens exported were likely to have been artificially propagated in accordance with the definition of this term contained in Resolution Conf. 11.11 (Rev. CoP13), and whether detailed reporting may be required. It is possible that some of these species may be newly described.

#### *Trade reported by non-range States*

Trade in artificially propagated specimens of most of the highly-traded species listed in Table 1 primarily originated in range States of the species. However, the majority of the trade in *Cycas revoluta*, the most highly traded artificially propagated species, originated in Costa Rica, a non-range State (59% of trade according to exporter-reported data). This species naturally occurs in China and Japan. Costa Rica first reported exports of 5813 live artificially propagated plants in 1991. Whilst imports to the country, which became a Party to the Convention in 1975, were not reported until 2001; seeds may have been legally acquired which are exempt from the provisions of the Convention.

Trade in *Gymnocalycium mihanovichii*, which is native to Argentina and Paraguay, also primarily originated in a non-range State of the species, the Republic of Korea (65% of trade according to exporter-reported data).

## ***Conclusions on illegal trade in Appendix II plant taxa***

- Substantial quantities of illegally traded plant specimens of species listed in Appendix II were confiscated/seized over the period 2006-2010. The analysis of data from annual reports suggests that illegal trade in orchids is most prevalent; Biennial report data indicates that seizures of cacti were more significant, and literature consulted suggests that both of these groups are represented highly in illegal trade. As orchids and cacti make up the majority of the legal trade, the seizure data are perhaps as expected.
- Focusing on the ten taxa most commonly reported as seized in annual reports for the period 2006-2010, virtually all of the legal trade in those taxa was in specimens produced by artificial propagation rather than collected from the wild. The most significant genus in illegal trade was *Phalaenopsis*. Over 25,000 specimens of the top ten taxa reported as seized were hybrids, which are unlikely to have been seized because of a false declaration of the source.
- Otherwise, it is rarely possible to infer illegal trade in artificially propagated plants from the CITES Trade Database. Seizures are generally reported under source code "I". If the reported origin of the seized specimens is reported (wild, artificially propagated) it is not included in the CITES Trade Database, which allows for inclusion of only one source code. There were no clear trends indicating significant increases in seizures/confiscations of live plants or over the period 2006-2010.
- Concern was raised by one Party that many newly listed species have been misdeclared as artificially propagated, where they are in fact wild-collected.
- There was very little evidence to indicate that trade had switched from wild to artificially propagated sources except possibly for *Cyclamen cilicium*. However, it appeared that many new taxa are emerging in trade as artificially propagated, with 326 taxa meeting a sharp increase criterion for the years 2009 or 2010. The list of emerging taxa could be provided to the Plants Committee for them to assess on the basis of expert opinion whether exports of such taxa are likely to be in accordance with Resolution Conf. 11.11 (Rev. CoP13), and whether detailed reporting of these taxa may be required.

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## Options for the Plants Committee to consider in relation to revised reporting of artificially propagated plants listed in Appendix II.

Strict control of the trade in Appendix II artificially propagated plants appears to put a significant burden on implementation of the reporting requirements of the Convention for Parties that have a high volume of trade in these taxa, according to some questionnaire responses.

Four options to streamline reporting for Appendix II artificially propagated plants are provided below for consideration by the Plants Committee, with a view to revising the current guidelines regarding the accepted taxonomic level of reporting.

There is only a very small percentage of reports that do not include the information outlined in Resolution Conf 12.3 (Rev. CoP15) - for example, inclusion of source and purpose codes, type of specimen (term), quantity in trade, and country of import and (re-export). Whilst reporting this information on a shipment-by-shipment basis is likely to be a burden for Parties, it can contribute to tracking changes in trends over time and it is therefore recommended that the Plants Committee consider retaining this guidance in conjunction with the potential options outlined below.

The options presented below, aim to reduce the reporting burden on Parties, whilst retaining the ability to monitor emerging trends and implementation of the Convention. It would also be possible to follow a combination of these possible approaches.

1. **Adopt the United States approach of reporting taxa of Appendix II artificially propagated plants according to their taxonomic level of listing in the CITES Appendices, whether it be at family, genus or species level.** Using this method, species included in the Appendices at the genus or family level are recorded at that level, so specimens of Orchidaceae are recorded as Orchidaceae spp. This approach may have some benefits in that it is already tried and tested by one major importer which has implemented it for over 10 years. As the majority of the trade in artificially propagated plant taxa is in species that are listed at the family level (all Orchidaceae, Cactaceae and Cycadaceae) this would be a significant change in reporting. However, it is also noteworthy that the United States does retain species-specific information on file should further scrutiny be necessary.

The downside of adopting the approach of recording at higher taxon level is that it apparently contravenes the requirement of the Convention to report on specimens of species included in Appendices I, II and III (Article VIII, paragraph 7 (a), and Paragraph 6 (b)). Also, in cases where taxa are traded as both artificially propagated plants and plants taken from the wild the detailed species-level information will no longer be available to detect unusual patterns of trade that may indicate implementation problems relating to unsustainable trade and/or illicit trade.

2. **Report trade at a higher taxonomic level for all re-exports of artificially propagated specimens of Appendix II species**

According to the view that resources of CITES Authorities should be concentrated on specimens that first appear in international trade, species-level reporting may be less valuable for any subsequent re-exports of Appendix II artificially propagated plants. If this were found to be the case, trade in re-exports could be reported at either the genus or family level, provided that the re-exports are clearly distinguished from direct exports within annual reports by indication of the country of origin.



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The limitations of this approach are i) it would not streamline reporting for a substantial proportion of the trade as the proportion of total trade in live specimens of species listed in Appendix II that is reportedly re-exported, (as indicated by inclusion of country of origin data in annual reports) is only 2.2% and 2.6% as reported by countries of import and countries of export, 2006-2010; ii) the evidential basis to support concentration on the first specimens that appear in trade is not clear.

### **3. Report trade at genus level for hybrids only**

The trade in hybrids represents a substantial proportion of the trade in artificially propagated plants (23% as reported by exporters, 2006-2010). There are no naturally occurring wild populations of hybrids listed on the CITES Appendices (i.e. they are all produced by methods of artificial propagation). As noted in PC14 Doc 8.1, referring to orchids specifically, the trade in artificially propagated hybrid orchids presents no discernible direct threat to wild orchid populations. Detailed reporting of trade in hybrids is therefore likely to be less valuable.

All hybrids could be reported at the level of genus, or at the level of family where intrageneric hybrids are concerned. Currently, inclusion of intergeneric hybrids within the CITES Trade Database is at the family level due to limitations of the database.

The benefit of this simple approach is that it would be relatively straightforward for Parties to implement. The current reporting exemption for only orchid hybrids may cause confusion, as some Parties report at the genus level for all orchid hybrids, and some Parties use this approach for all plant hybrids. Orchids do make up the vast majority of hybrids reported in trade (>99% according to export data, 2006-2010). The main limitation of this approach is that it would not streamline reporting for a substantial proportion of the trade.

### **4. Provide detailed reports for newly described taxa and artificially propagated taxa that are not regularly found in trade or are emerging in trade. Taxa found regularly in trade could be reported at the genus/family level**

This approach suggests that detailed reports (at the species level) would be required for:

- newly described species (as determined by the Plants Committee)
- taxa that have not previously been exported from a country as artificially propagated (in order to ensure that emerging trade trends continue to be captured)

Detailed annual reports (at the species level) would not be required for species included in a list of taxa regularly found in trade as artificially propagated (based on levels of trade of over 100 specimens for 8 of the 10 most recent years, traded for commercial purposes). These taxa, along with all hybrids and re-exports could be reported at the family level. A list of species that are determined to be regularly occurring within trade, and for which reporting could be at the genus or family level, can be provided on request if necessary.

A list could be circulated to Parties in the form of a notification or included within the *Guidelines for the preparation and submission of annual reports*. It would need to be updated fairly regularly (at least annually) to take account of emerging trade trends.

The difficulty with this approach is again, that it would require Parties to consult an extensive list of species that would change over time, unless Parties are able to automate such processes in the context of tools such as electronic issue of permits.

## ***Additional observations***

- To maximise the utility of seizure data within biennial reports for further analysis of trends etc., guidelines for standardisation of the data will be required. It is recommended that the

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CITES Standing Committee (perhaps through its Working Group on Special Reporting Requirements consider a standardised format for seizure reporting within biennial reports.

- A total of 76% of live plants reported as confiscated or seized originated from the Asian Region (as defined by CITES), this corresponds to the percentage of legal trade from Asia. Continued vigilance with regard to plant trade from the Asian Region is recommended.
- Parties that are developing electronic permitting systems that are capable of automated data exchange (e.g. via XML) may in future be able to submit their permit data directly for inclusion of annual report data within the CITES Trade Database. If Parties require full details of shipments for electronic permitting purposes, then, providing full details of all shipments of artificially propagated Appendix II plant trade should not present a reporting burden for Parties. The burden will remain for Parties without such electronic systems.
- Parties currently considering data exchange tools (webservices) may wish to participate in the UNEP-WCMC EPIX project (Electronic Permit Information Exchange), which allows other CITES Parties to query and exchange CITES Permit data over the internet in near-real time. This system could potentially be explored to test the feasibility of electronic capture of permit data to streamline annual reporting with regard to artificially propagated specimens of species included in Appendix II.
- The launch of the automated checklist of CITES species in 2013 may help to address the issue raised by Parties that consistent reporting of CITES standard nomenclature is problematic for artificially propagated plants, by providing a rapid search facility.

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## Annex A

### Questionnaire on Reporting of Trade in Artificially Propagated Plants of species in CITES Appendix II

This questionnaire has been prepared by UNEP-WCMC to gather information on the practices of Parties in the reporting of trade in artificially propagated plants of species in CITES Appendix II in order to assist the CITES Secretariat in implementing Decision 14.39 (Rev. CoP15).

Name of country submitting information.....

1. Do the annual reports of your country include data on trade in artificially propagated plants of species in Appendix II? .....YES/NO

*If you answered 'NO', go to question 3.*

2. If 'YES', please select a), b) or c) below to specify how this trade is reported within annual reports:

- a) Each individual permit is recorded

If you selected a): which of the following details are included in the annual report:

- ☐ Appendix
- ☐ Species
- ☐ Purpose of transaction
- ☐ Part/derivative code (e.g. LIV, ROO)
- ☐ Quantity
- ☐ Source
- ☐ Country of import/export/origin if re-export
- ☐ Permit number

- b) The report contains a summary of permits issued

If you selected b): please specify below how permits are summarised, e.g. taxonomic groups, country of import, country of export, or other):

.....  
.....  
.....  
.....

- c) Trade is reported in another way

If you selected c): please specify how the trade is reported:

.....  
.....  
.....  
.....

3. Please tick one of the options below, to indicate at which taxonomic level you report the trade:

- ☐ Species level
- ☐ Genus level
- ☐ Family level
- ☐ It varies, depending on the plants being traded

If you selected 'it varies [...]': on what basis do you determine the appropriate level? .....

4. Concerning trade in hybrids, please tick one or more of the options below to indicate how the trade is reported:

- ☐ The parent species of hybrids are specified
- ☐ Reporting is at the higher taxon level and "hybrid" is specified for Orchids only
- ☐ Reporting is at the higher taxon level and "hybrid" is specified for all taxonomic groups
- ☐ Other (please specify).....

5. Are confiscations and seizures of Appendix II artificially propagated plants reported in your:

- ☐ CITES annual reports
- ☐ CITES biennial reports

6. Can you provide any additional details of known illegal trade in artificially propagated plants that has not already been reported through annual or biennial reports?

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.....

Please provide any other relevant comments on reporting of artificially propagated plants of species in CITES Appendix II

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.....  
.....

Name of person completing questionnaire.....

Email address.....

On behalf of: Management Authority / Scientific Authority (delete which does not apply)

Thank you for taking the time to complete this questionnaire. Please return it to UNEP-WCMC before 30 April 2012. Printed copies can be handed to the UNEP-WCMC representative at the CITES Plants Committee on 26<sup>th</sup> or 27<sup>th</sup> March. Electronic copies should be submitted to [species@unep-wcmc.org](mailto:species@unep-wcmc.org)

