

National Clean Plant Network for Hops Charter
Revised August 5, 2014



THE MISSION of the National Clean Plant Network for Hops (NCPN-Hops) is to assist in the production of high quality asexually propagated hop plants free of targeted plant pathogens and pests that cause economic loss, to protect the environment and ensure the global competitiveness of specialty crop producers.

This mission will be achieved through the following goals (see [Appendix A](#)):

1. NCPN-Hops will provide safe sources of selections from private and public programs.
2. NCPN-Hops will establish and maintain foundation mother plants to provide clean planting stock to industry within prescribed state and federal certification schemes.
3. NCPN-Hops will establish and coordinate working relationships with and among appropriate entities that certify plants for planting.
4. NCPN-Hops will develop and promote best management practices that will be used by industry to maintain pathogen- and pest-indexed status of plants for planting.
5. NCPN-Hops will encourage, develop and engage all possible extension, education and outreach resources that will interact with and train key stakeholders, such as commercial nurseries and growers, to ensure the successful dissemination and use of NCPN products and services. Grower education is an important component of the NCPN-Hops.
6. NCPN-Hops will provide a forum to discuss enhancing the systems approach to distribution, exchange and introduction of new varieties.

Charter for the National Clean Plant Network for Hops:

- 1) The name of this organization shall be the "National Clean Plant Network for Hops" (NCPN-Hops).
- 2) Definitions:
 - a) Hop plants shall refer to plants of the genus *Humulus* regardless of their use for hops production or as ornamental plants.
 - b) Viruses shall refer to viruses, viroids, phytoplasma, and other graft-transmissible agents that have not been identified.
 - c) The National Clean Plant Network (NCPN) is the network of centers established in the "The Food, Conservation, and Energy Act of 2008" under the Secretary of Agriculture (USDA).
- 3) NCPN-Hops operates under the umbrella of the NCPN.
- 4) NCPN-Hops is a specialty crop-based group to provide input to the NCPN in matters relating to the mission of this organization.
- 5) NCPN-Hops shall have a governing committee (referred to within the NCPN network as the Tier 2 specialty crop committee) that shall consist of 10 voting members:
 - a) the following voting members:
 - i) one representative from each of the hop commissions of Washington, Oregon and Idaho; two at-large growers representing commercial hop production (at least one at-large grower will be from outside of the Pacific Northwest growing region);
 - ii) one brewer representative and one hop merchant representative, at least one of which is a member of Hop Research Council;
 - iii) one private hop breeding program representative;
 - iv) one public research representative with plant pathology expertise;
 - v) one state regulatory agency representative.
 - b) the following non-voting members:
 - i) NCPN National Coordinator or other representative appointed by NCPN governing board;
 - ii) one National Clonal Germplasm Repository (NCGR) representative;
 - iii) an APHIS (PPQ) observer appointed by USDA-APHIS;
 - iv) one university public hop breeding program representative;

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- v) subject matter experts invited to participate *ad hoc* by the Tier 2 voting members
- c) The voting members shall be proposed by other Tier 2 members and industry stakeholders. Membership will be decided by majority vote of the voting members of the Tier 2.
 - i) Criteria for voting members of the commodity body:
 - (1) voting members must belong in good standing to the major constituent group that they represent (that is, grower, brewer, commission or research bodies);
 - (2) voting members must represent their constituent group regardless of local or personal affiliations
- d) The voting members shall select a chair and vice-chair from within the ranks of the voting members.
 - i) The terms of the chair and vice-chair are two years.
 - ii) There is no limit to the number of times that a committee member may serve as chair and/or vice-chair.
 - iii) The chair and vice-chair are allowed to vote on issues before the committee.
- e) The term of the voting members shall be four years (with the exception of the committee established in January 2010. The first term of one-half of the voting 2010 members will be two years in order to stagger the selection of new committee members). The Selection Committee will determine terms.
 - i) There is no limit to the number of times that a committee member may serve.
 - ii) If two consecutive meetings have not been attended by the voting member, the chair will consult with the individual about their intent to continue participating and potentially recommend replacement.
 - iii) Each voting member may formally propose an alternate to serve in their absence, with alternates approved in advance of any meeting attendance by the Chair and Vice-Chair. Alternates will be maintained on the mailing list, to stay informed of NCPN-Hops governing committee activities.
 - iv) Vacancies created by mid-term resignation or term expiration will be filled by seeking nominees from the impacted segment, which will be confirmed by a majority vote of the Board.
- f) The quorum must represent a simple majority of voting members.
- g) Resolutions and revisions to the Charter will pass by a 2/3 majority vote of members.
- 6) Role of the NCPN-Hops Tier 2 specialty crop committee:
 - a) Voting members of the NCPN-Hops can nominate candidates from agriculturally-related state and federal government agencies to serve on the NCPN Tier 1 governing board.
 - b) Provide leadership and direction for the NCPN-Hops.
 - c) Provide advice on policy to the NCPN.
 - d) Establish priorities for funding programs:
 - i) The NCPN-Hops governing committee will perform a needs assessment to establish requirements to support the service, research and extension mandate of NCPN-Hops;
 - ii) The NCPN-Hops governing committee will request, receive and review the proposals for funding, consolidate and forward the NCPN-Hops budget proposal to NCPN governing board for consideration.
 - e) Deliverable outcomes will be identified and reviewed on a regular basis.
 - f) Working groups can be established as necessary to formulate operating procedures to meet goals.
- 7) This charter and supporting documents will be available for public review.
- 8) The charter can be reviewed by the governing committee at any time and changed. If consensus is unachievable, changes to the charter will require support of a 2/3 majority.
- 9) Headquarters of the NCPN-Hops will be located at Washington State University in Prosser, WA.

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- 10) The NCPN-Hops commodity committee will convene meetings at least two times a year.
- 11) NCPN-Hops will hold an annual general meeting to inform and receive input from stake holders.
- 12) NCPN-Hops will evaluate the performance of the programs on an annual basis. The NCPN-Hops commodity committee, with input from the entire hop network, will establish the process and timetable for program evaluation.

Appendix A:

Actions to achieve National Clean Plant Network for Hops (NCPN-Hops) goals:

Goal 1: NCPN-Hops will provide safe sources of selections from private and public programs.

- a) NCPN-Hops will establish, maintain and enhance a network of facilities and expertise for testing and providing therapy for clones of hop plants based on climatic suitability, current infrastructure and expertise, regional needs, and disease and insect pest pressure.
 - (1) Conduct a review of existing facilities to assess strengths and weaknesses.
 - (2) Review state and federal regulations regarding facilities operations to determine where modernization is needed.
 - (3) Develop, validate, and implement more rapid and improved testing and therapy protocols.
- b) NCPN-Hops will use reliable, proven available methods to release pathogen and insect pest tested planting material in a safe and timely fashion.
 - (1) NCPN-Hops will develop risk assessment and risk management protocols;
 - (2) NCPN-Hops will agree on diagnostic protocols and diseases and insects being screened consistent with international plant exchange requirements and state certification standards
 - (3) NCPN-Hops will develop a sharing system for positive controls.
 - (4) NCPN-Hops will develop an audit process.
 - (5) NCPN-Hops will use reasonable methods to obtain desired accessions from reliable sources both within and outside the network.

Goal 2: NCPN-Hops will establish and maintain foundation mother plants to provide clean planting stock to industry within prescribed state and federal certification schemes.

- a) NCPN-Hops will establish collections of cultivars that are tested and found to be free of targeted pathogens and insects in accordance with NCPN-Hops standards.
 - (1) NCPN-Hops will develop a process for prioritizing what will be in a collection.
 - (2) NCPN-Hops facilities will maintain collections in accordance with standards published by NCPN-Hops.
 - (a) Standards will include site selection, site preparation, isolation distances, pest monitoring protocols, inspection and testing regimes, among other factors.
 - (b) Standards will meet or exceed standards of any certification requirement needed for practical distribution of collection material.
 - (c) Wherever possible, the NCPN-Hops will strive to produce propagation material free of all detectable pathogens.
- b) NCPN-Hops will develop procedures and fee schedules specific to proprietary clones.
- c) NCPN-Hops will develop a transparent prioritization process for orderly distribution of plant material when demand is greater than availability.
- d) NCPN-Hops will establish diagnostic guidelines and national standards for certification and maintenance.

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- (1) NCPN-Hops will aggressively promote research to develop rapid, accurate testing techniques to meet its needs and those of regulators and the industry.
 - (2) NCPN-Hops will facilitate optimization and validation of pathogen and pest detection methods according to accepted protocols to satisfy regulatory needs.
 - (3) NCPN-Hops will coordinate development, optimization and validation efforts with other entities such as the National Plant Diagnostic Network, academic institutions, USDA-APHIS, USDA-ARS and state agencies and foreign plant protection agencies and scientists.
 - (4) NCPN-Hops will encourage and participate in etiological research of significant diseases for which a causal organism is unknown.
 - (5) NCPN-Hops will encourage and participate in research on the epidemiology and economic impact of significant diseases.
- e) NCPN-Hops will investigate, determine and implement the most appropriate methods for effective and rapid elimination of pathogens and insect pests from hops.
- (1) NCPN-Hops will investigate methods for rapidly increasing candidate plants obtained through a therapeutic process.
 - (2) NCPN-Hops will validate and adapt new therapeutic techniques.

Goal 3: NCPN-Hops will establish and coordinate working relationships with and among appropriate entities that certify plants for planting.

- a. NCPN-Hops will assist in discussions to coordinate and harmonize state certification programs to develop a national certification minimum standard that would qualify for export to foreign markets.
- b. Engage entities that can facilitate communications, such as the National Plant Board and National Association of State Departments of Agriculture, to identify stakeholders to develop a communication plan.
- c. Develop an inventory of existing capabilities, roles and authorities.
- d. Clarify and catalogue existing certification schemes, making harmonization a priority.

Goal 4: NCPN-Hops will develop best management practices that will be used by industry to maintain pathogen- and pest-indexed status of plants for planting.

- a) NCPN-Hops will prepare best management practice guidelines for the maintenance of foundation grade collections and for nursery plantings and production operations.
- b) NCPN-Hops will assist in the execution of best management practices where expertise by NCPN-Hops is required.
- c) The best management practices may be adopted by state/federal regulatory agencies for their own certification programs.
- d) The efficacy of recommended best management practices will be demonstrated through peer-reviewed or validated research where possible.

Goal 5: NCPN-Hops will encourage, develop and engage all possible extension, education and outreach resources that will interact with and train key stakeholders, such as commercial nurseries and growers, to ensure the successful dissemination and use of NCPN-Hops products and services.

Goal 6: Provide a forum to discuss enhancing the systems approach to distribution of nursery stock and the safe and efficient exchange and introduction of new varieties and rootstocks

- a) NCPN-Hops will seek to develop partnerships with land-grant and other university based extension and outreach services to interact with commercial nurseries, industry associations, and producers.

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- b) NCPN-Hops will develop strategies and resources to ensure the successful and impartial distribution and use of its services and products.
- c) Extension and outreach resources will provide a communication link with NCPN-Hops services and products in the field.
- d) NCPN-Hops will develop strategies and resources to ensure that educational materials about its services and products are included in college and university curricula. NCPN-Hops will establish public and member-only websites.
- e) Provide links to existing sources of clean planting stock.
- f) Develop and maintain registries for plant material in the program.
- g) NCPN-Hops will develop state-of-the-art administrative and record keeping assets, methods and service that will ensure the security, continuity and accuracy of all its activities, products and services.
- h) Develop a secure internet sharing system.

Appendix B:

Context Statement for the National Clean Plant Network for Hops:

In 2013, the U.S. was the world's largest fresh hop producing country and the largest alpha-acid producing country. The U.S. produced 80.6M pounds of hops in 2008 with a farm gate value of \$320M; 70% of the crop is exported to 60 different countries. The industry continues to experience renewed growth and optimism, and the acreage increased from 30,911 in 2007 to 35,224 in 2014. Twenty-two major varieties plus several varieties grown on limited acreage are grown commercially in the U.S. Since 1964, a virus-free certified rootstock program has existed at WSU and supported by a combination of industry contributions, check-offs from the sale of certified material, and in-kind contributions of WSU. In 2004, hop stunt disease, a devastating disease that reduces yield by 60% or more, was detected for the first time in the U.S. hop industry. A long latent period after infection before the appearance of readily visible symptoms led to inadvertent propagation from infected plants and the resulting demand for reliable sources of disease free hop propagation material. The U.S. industry is struggling to maintain phytosanitary standards while accommodating the current increase in planting and re-alignment of varieties. Support is urgently needed to augment industry funding to help rebuild the rootstock program to minimize the distribution of hop stunt disease and other virally induced diseases in the hop industry.

In just 10 years, the foundation hop program operating at Washington State University has transitioned from a state program to a regional program, and now serves hop growers all across the United States. The recognition of hop stunt disease throughout the production areas emphasizes the need to take a cooperative regional approach to reduce the dissemination of hop planting material infected with virus-like agents. By providing foundation planting material for propagation to nurseries that service Idaho, Oregon and Washington, virtually all commercial U.S. production is impacted. Material is also provided either directly or indirectly to other states that have small local hop markets. The average life of a hop planting is 10 years as yield decreases as the incidence of viruses and viroids increase. As a result of rejuvenation and variety realignment, it is anticipated that approximately 4,000 acres of hop plants will be planted each year. The distribution of virus and viroid tested material is an effective strategy to reduce the impact of these agents as the industry moves forward.