
High Bush Blueberry Stem Gall Wasp Report

By Pat LaPoint - LaPoint's Hill 'n' Hollow, 7087 Rogers Rd. Pavilion, NY 14525
585-584-3978 e-mail lapoint@2ki.net

I applied for, and received a SARE Grant to study the problems we are having in our two acre organic, high bush blueberry patch with the Blueberry Stem Gall Wasp (*hemada nubilipennis*).

The purpose of this report is three fold.

- ✓ To inform interested blueberry growers of the findings at this point
- ✓ To collect data & locations from growers who have a similar problem
- ✓ Offer a life cycle science curriculum to anyone interested in teaming with a school (4-5 grade) using the galls from your patch.

Our problem may be different than others who experience this pest. The normal eradication process is to prune the gall from the blueberry bushes and destroy it. In my case, although I prune and destroy the galls, the wasps do not go away. Three years ago, after pruning we had over 3,000 new galls in the first 2 rows of the patch. It seemed worthy to investigate, learn and share what I could about this problem.

Our situation: Our two acre plot is located on top of a hill, elevation 1300'. The rows are aligned in a north-south pattern. The three most westerly rows are the only rows that have galls.

I did not prune the galls over the winter of 2000, however, I did mark and count the population. The wasp emerged early - on May 7th after unseasonably warm temperatures. The leaves were still in whorl stage with no new growth appearing on the day of emergence. This was surprising because according to information currently available* the wasp lays eggs in the new growth of high & low blueberry shoots; (there was no apparent new growth on our bushes). At the suggestion of Dr. Greg English-Loeb at the NYS Experiment Station at Geneva, NY and Dr. Marvin Pritts at Cornell University, I covered several galls with remay so the emerging wasps were contained in the area covered to observe

whether the wasp could lay eggs in an area with no visible new growth.

We only had sixty-five galls as a result of this early emergence, including only one gall from the covered wasps. In mid-August a second emergence was observed with fifty more galls appearing, which establishes a second life cycle in the gall wasp in our area. (At this point I never knew a second emergence was possible. The only research I am aware of is from lowbush blueberries in Northern Ontario, Canada). Presently each gall is marked, mapped and ready for the second study in 2002. Comparing gall numbers in the last five years, the numbers for 2001 were very low. I believe the reason is because of the early emergence. This year the gall count will continue; I hypothesize airborne wasps are setting down in the patch because air currents are disrupted by the hedgerow on the west, this may be the reason for unusual large populations and why the gall is only found in the first three rows.

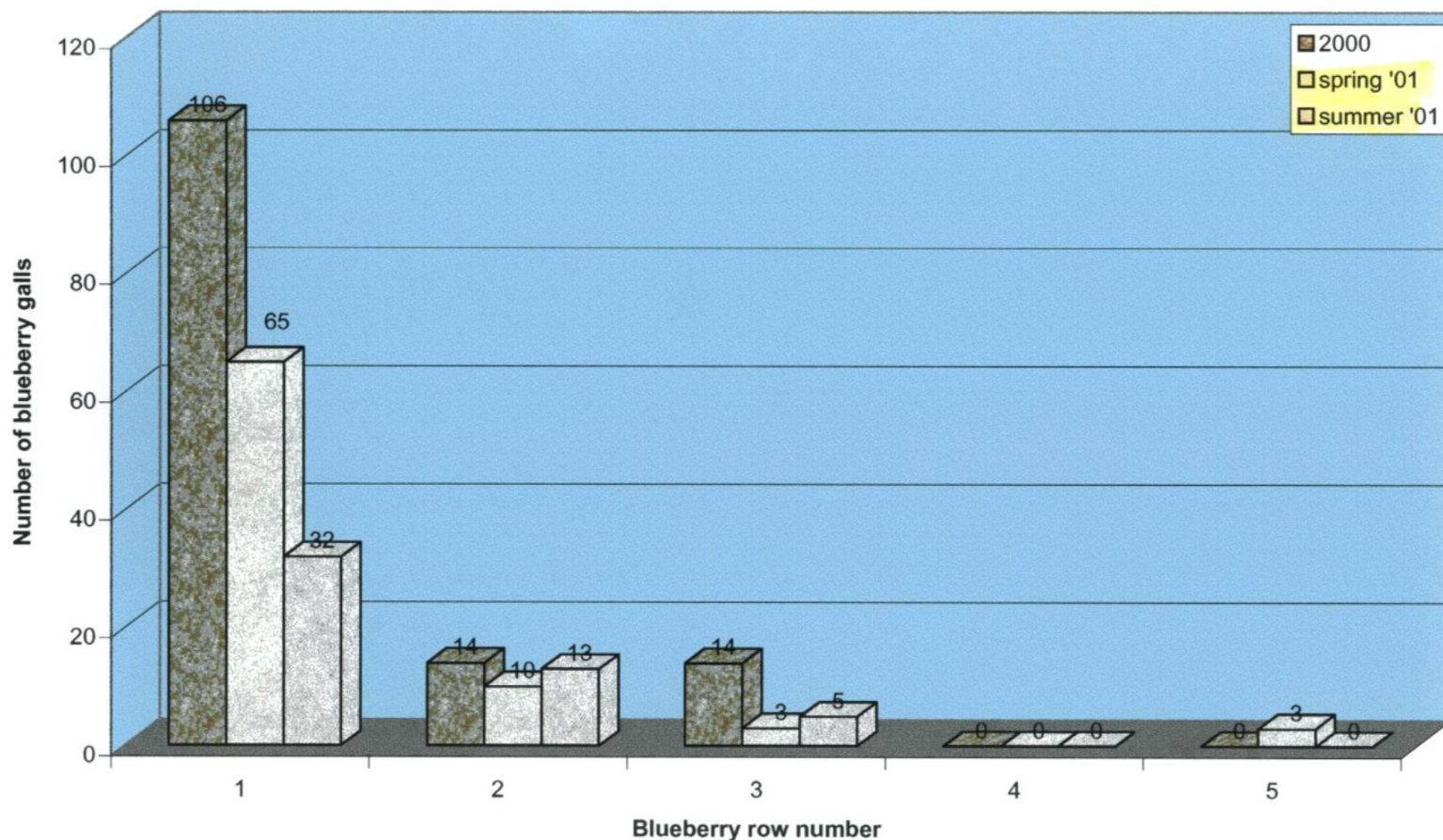
What you can do: I want to begin a data file for future reference. I would like to map locations of highbush blueberry fields that contain galls, as is being done for lowbush blueberries. I will share further information at the end of this years project. If you have an interest in a particular aspect of my investigation please contact me, using the information on the heading. **Also; if you are pruning please don't destroy the galls!**

Request the gall curriculum and use the galls as a life cycle study in a school (a good 4-H or scout project also) or club near you. Kids love hands-on projects.

Thanks to: Dr. Marvin Pritts, Dr. Greg English-Loeb and Dr. J.D. Shorthouse for their help with this project.

*Initiation and development of the stem gall induced by *Hemadas nubilipennis* (Hymenoptera: Pteromalidae) on lowbush blueberry, *Vaccinium angustifolium* (Ericaceae)
A. West and J. D. Shorthouse

Blueberry galls:discovered in Pavilion, NY at LaPoint's Hill 'n' Hollow



The two acre blueberry plot is located on top of a hill, elevation 1300'. The rows are aligned in a north south pattern. Row one is located on the western side of the blueberry patch with the row numbers moving eastward. This is important because the winds are normally west to east and constantly blowing. This may be a potential factor in the high population of galls in the first three rows.



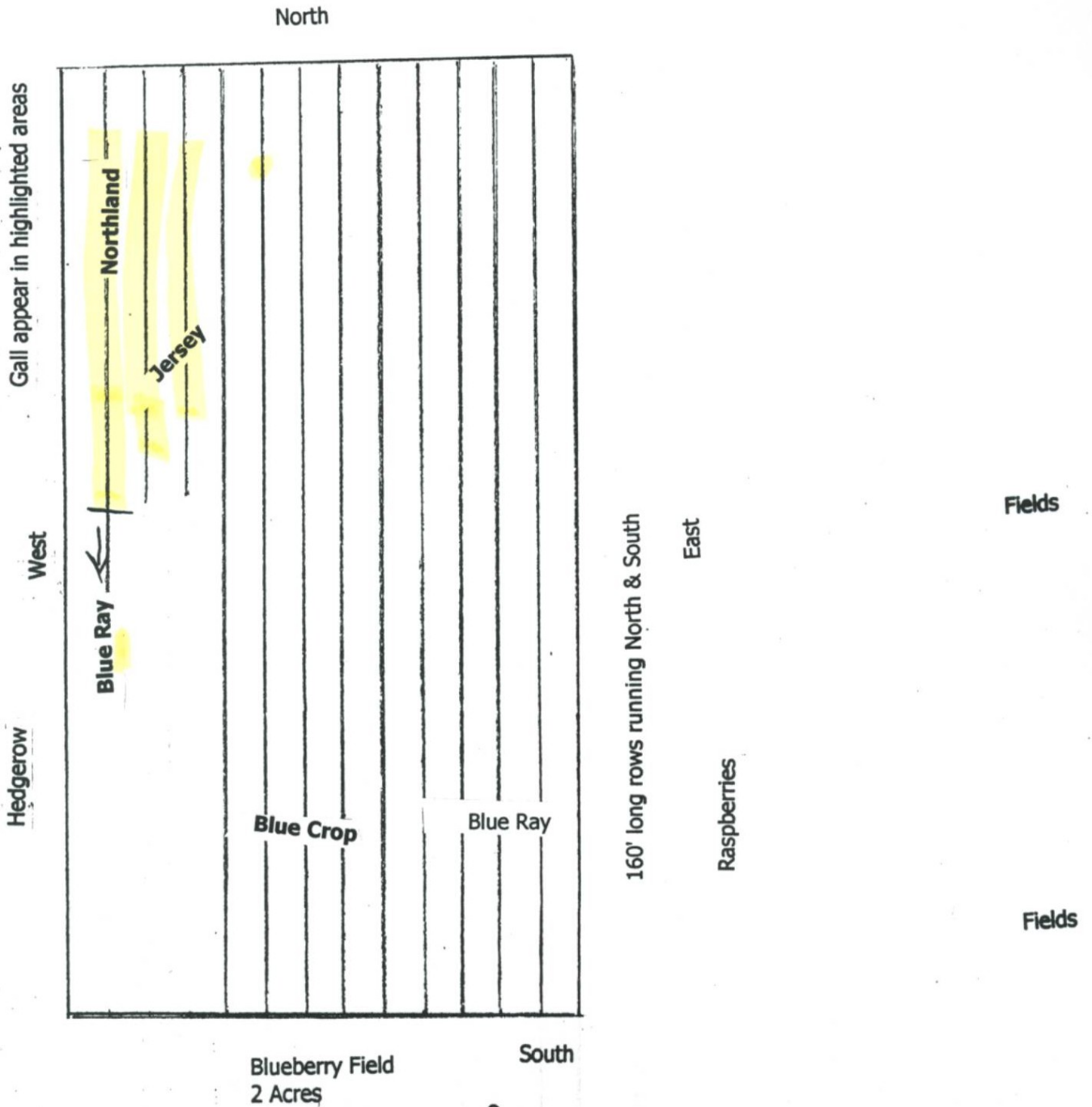
new summer
gall - hasn't
even turned
pink yet!

I have a few pictures
such as this that I
will send electronically
so you may reproduce
them.

Map of LaPoint's Blueberry Field:

Varieties: Northland
Jersey
Blue Crop
Blue Ray

Fields





Blueberry Stem Gall Wasp Project

We Need Your Help!!!!