

How To Control Late Blight

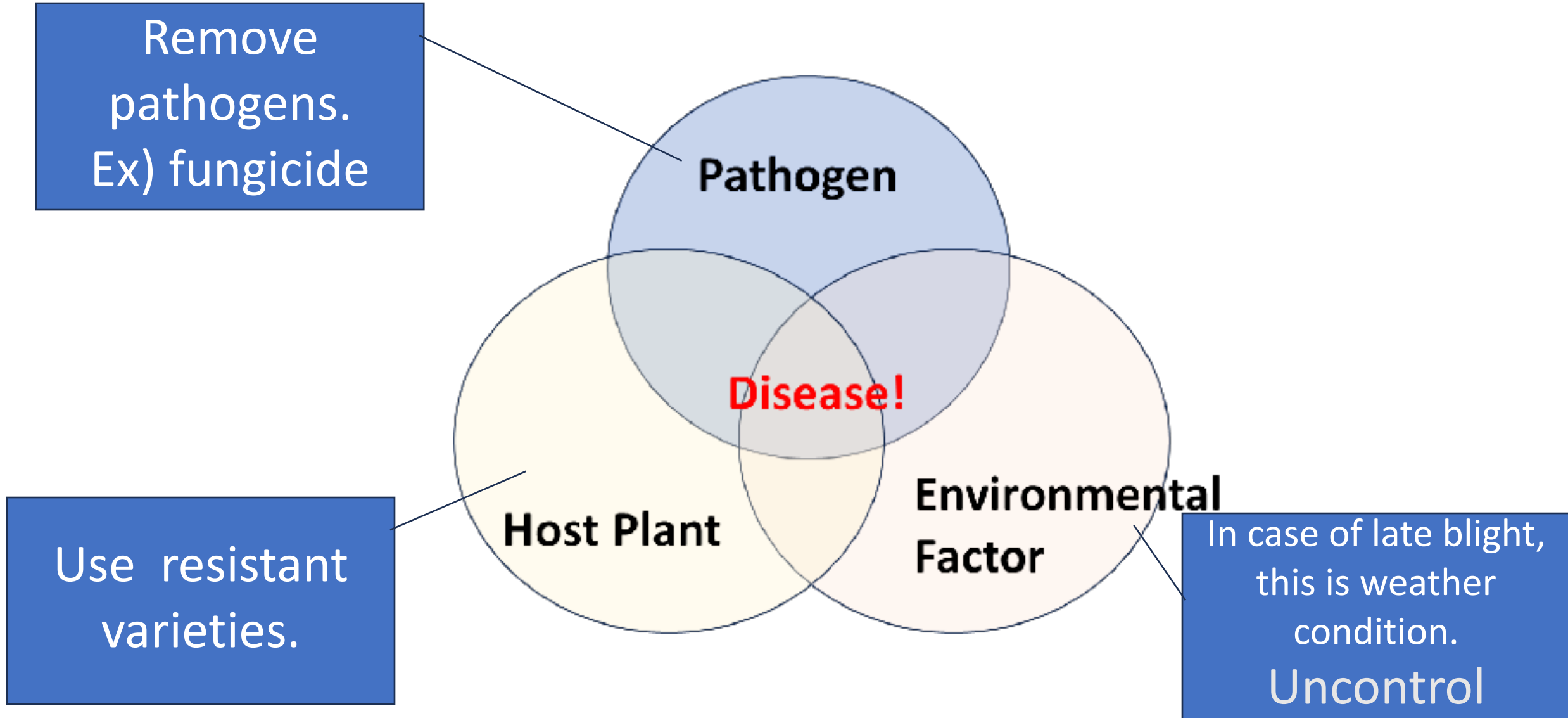
Ph. D. Sachiko Ikeda

Professional Engineer (Plant Protection)

Hokkaido Research Organization

Donan Agricultural Station

Disease control means breaking the disease triangle.



Fungicides approved for use in Japan

Fungicides	Dilution ratio	Duration of Effect
Mancozeb	400~600	7 days
Cymoxanil and Famoxadone	1000~1500	7 days
Cymoxanil and TPM	800~1500	7 days
Mandipropamid	1500	7 days
		14 days
Benthiavalicarb- isopropyl	750~1000	7 days
	750	14 days
Cyazofamid	1000~2000	7 days
	1000	14 days
Amisulbrom	2000~3000	7 days
	2000	14 days
Fluazinam	1000~2000	7 days
	1500	14 days
Fluopicolide and Propamocarb	800~1000	7 days
	800	14 days

Price Comparison for One-Month Treatment (Price per 10a when spraying at 100L/10a)

For 7-day intervals (4 times spray)		
Fungicides	Dilution ratio	Price (JPY)
Mancozeb	600	1800
Cymoxanil and Famoxadone	1500	2400
Cymoxanil and TPM	1500	2932
Mandipropamid	1500	3200
Benthiavalicarb-isopropyl	1000	3280
Cyazofamid	2000	2000
Amisulbrom	3000	1880
Fluazinam	2000	2400
Fluopicolide and Propamocarb	1000	2800

For 14-day intervals (2 times spray)		
Fungicides	Dilution ratio	Price (JPY)
Mandipropamid	1500	<u>1600</u>
Benthiavalicarb-isopropyl	750	2180
Cyazofamid	1000	2000
Amisulbrom	2000	<u>1400</u>
Fluazinam	1500	<u>1600</u>
Fluopicolide and Propamocarb	800	<u>1750</u>

Halving the number of sprayings also halves the fuel costs and labor.

10 October, 2025 (令和7年)

日	月	火	水	木	金	土
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	1



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The start date for spraying is also important.

10 October, 2025(令和7年)

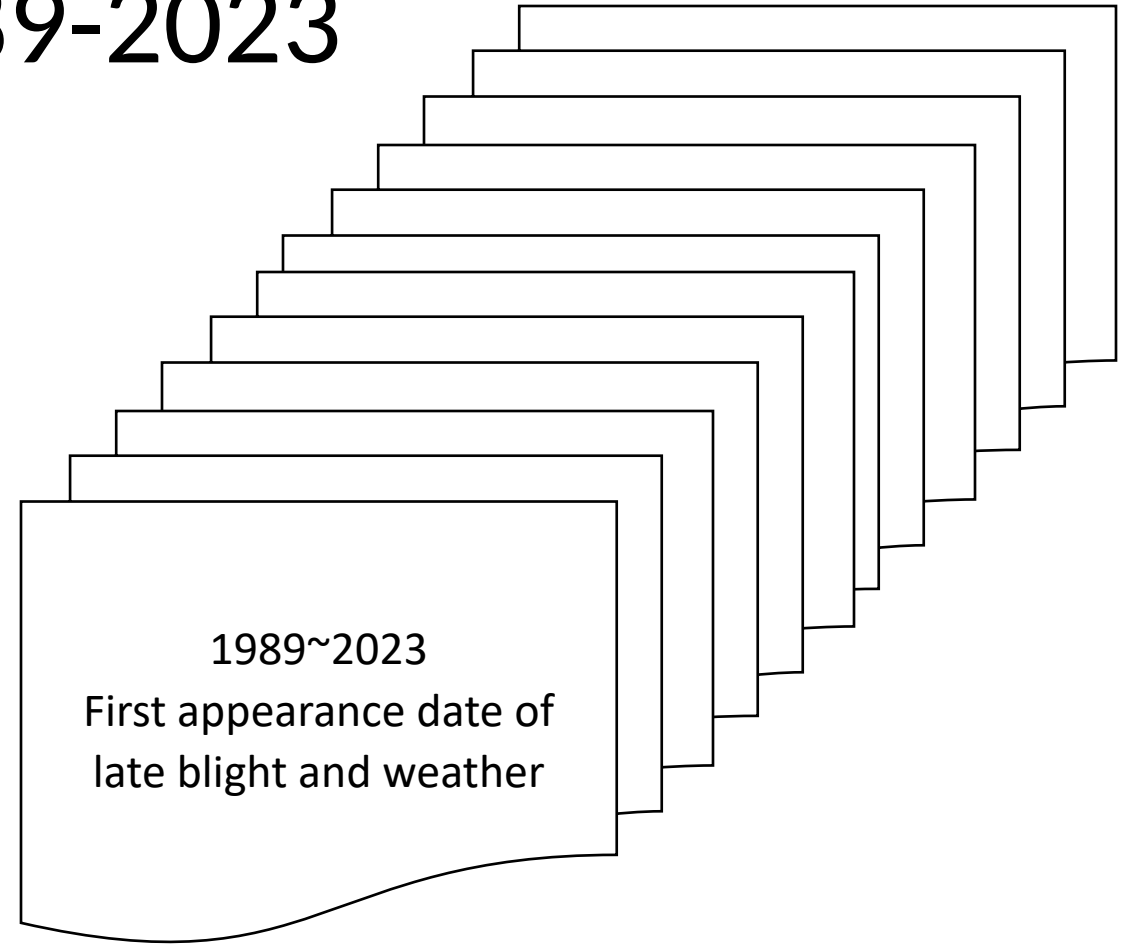
9	日	月	火	水	木	金	土	17	日	月	火	水	木	金	土
2025	7	8	9	10	11	12	13	2025	2	3	4	5	6	7	8
	14	15	16	17	18	19	20		9	10	11	12	13	14	15
	21	22	23	24	25	26	27		16	17	18	19	20	21	22
	28	29	30						23	24	25	26	27	28	29

日	月	火	水	木	金	土
28	29	30	1	2	3	4
5	6	7	8	9	10	11
12	13 スポーツの日	14	15 ?	16	17	18
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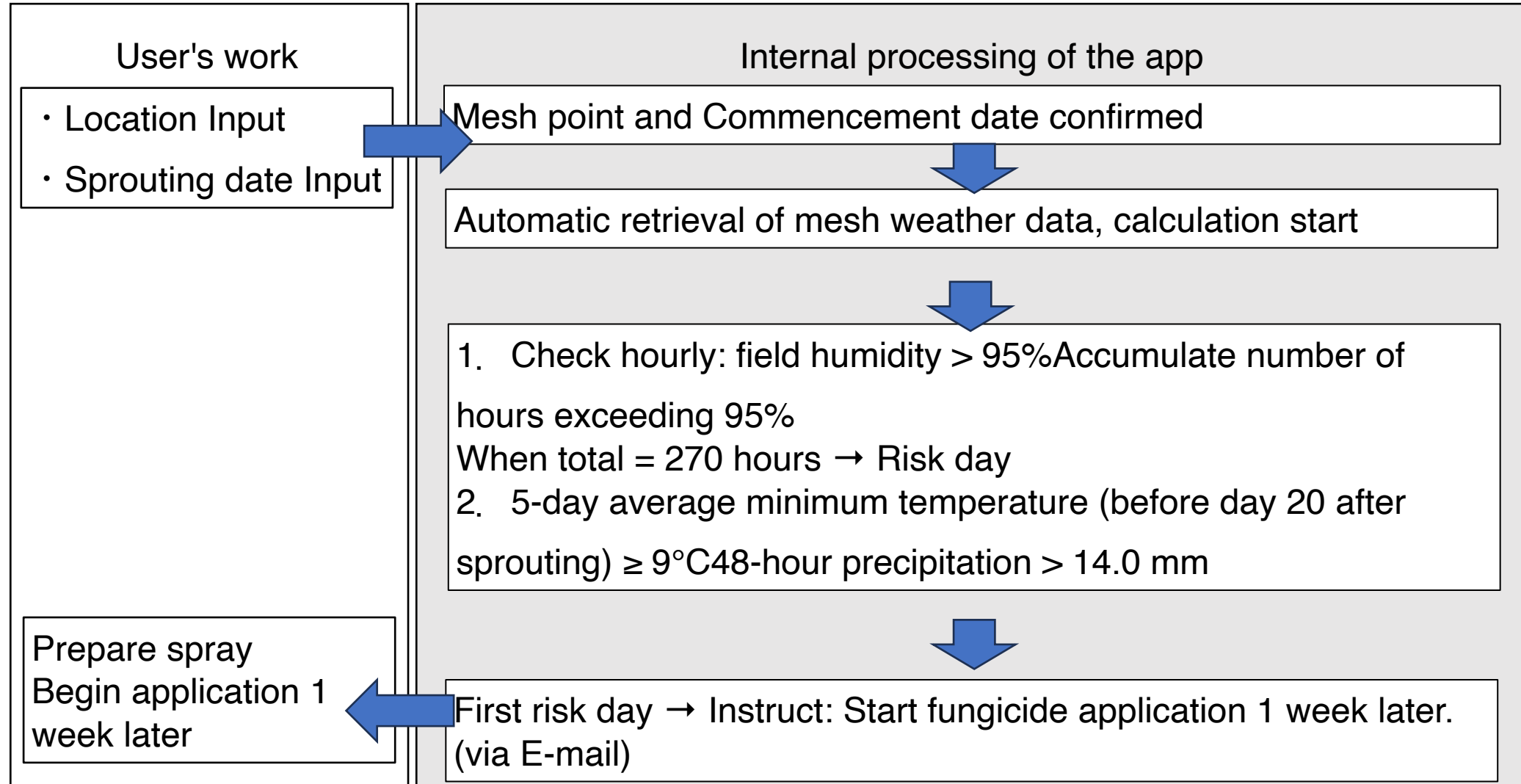
How can we predict the first occurrence?

Analyze past trends 1989-2023

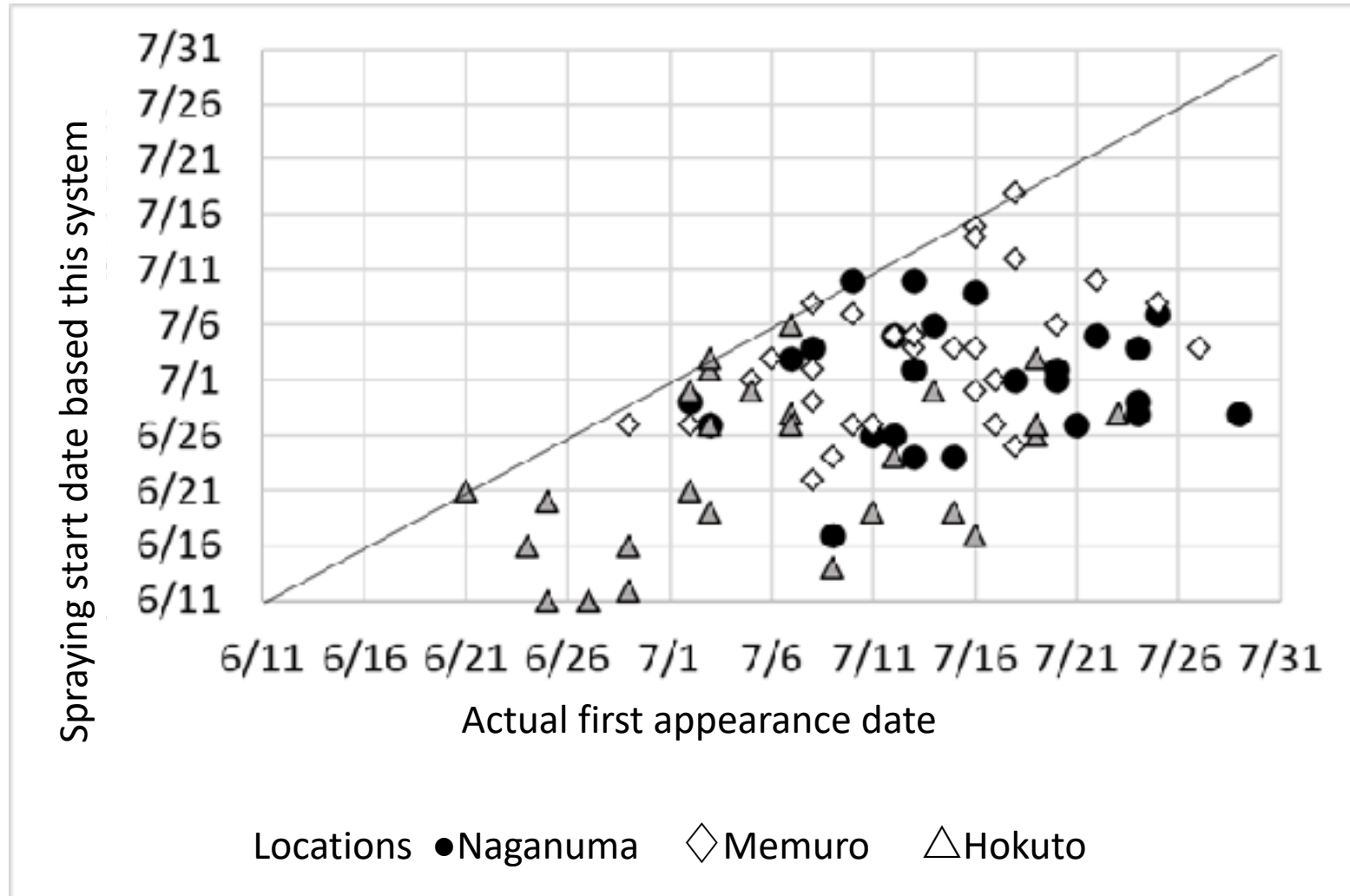
- Weather for the week prior to first appearance
- Precipitation
- Changes in humidity



We analyze over 30 years of data to develop Late Blight Control System for Hokkaido.



Spraying start date based this system and actual first appearance date



This system is built on over 30 years of accumulated data.

- Hokkaido: Surveys & records for 14 crops, 59 pests/diseases
- Surveys are legally required
- Similar surveys conducted nationwide, adapted to local conditions