

HAZELNUT CROP PROGRAM

January-February Pollination

Provides key nutrients for energy and pollination success

Phosron™ Foliar
at 2 quarts/acre*

CellMate® Foliar
at 2 quarts/acre

Transit Foliar®
at 6 ounces/acre
or
Transit Soil®
at 6 ounces/acre

March-April Ovule Development

Provides key nutrients for ovule development

CellMate Foliar
at 2 quarts/acre

Transit Foliar
at 8 ounces/acre
or
Transit Soil
at 8 ounces/acre

May-June Fertilization

Provides key nutrients for photosynthetic capacity and fertilization success

MicroBlend Foliar™ Zn-Mn-Cu
at 4-6 pints/acre

Zicron Soil®
at 2 quarts/acre
or
Zicron® Foliar
at 2 quarts/acre

Transit Foliar
at 8 ounces/acre
or
Transit Soil
at 8 ounces/acre

July-August Shell and Nut Development

Provides key nutrients for shell and nut development

BounceBack® Foliar
at 2 quarts/acre

Copron® Soil
at 2 quarts/acre
or
Copron® Foliar
at 1-2 pints/acre

Transit Foliar
at 8 ounces/acre
or
Transit Soil
at 8 ounces/acre

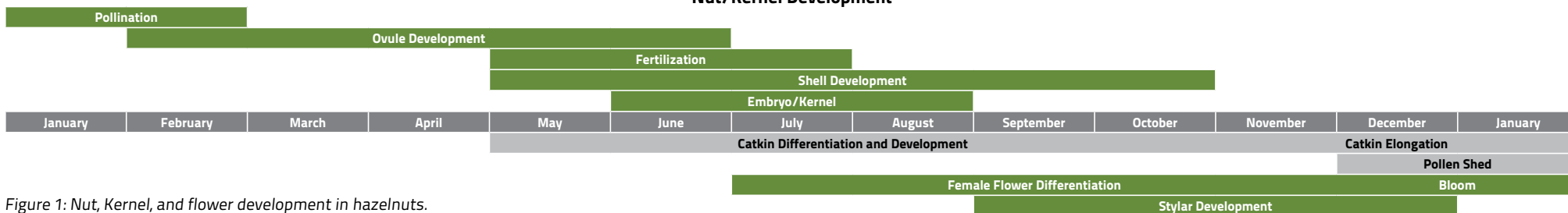
September Catkin Elongation and Female Flower Differentiation

Provides key nutrients for female flower differentiation

BoronBoost® Foliar
at 2 quarts/acre

Transit Foliar
at 8 ounces/acre
or
Transit Soil
at 8 ounces/acre

Nut/Kernel Development



Flower Development

Figure 1: Nut, Kernel, and flower development in hazelnuts.

Jeff Olsen, Extension horticulturist, Willamette Valley, Oregon State University

*Always add **FBS Harmony™** at 1 pint for every 2 pints of **Phosron Foliar** to improve compatibility and uptake.

This program can be adapted to individual field or farm conditions based upon soil and tissue tests.

Rates can vary and additional FBS products can be substituted to address specific nutrient deficiencies or stress situations.



PRODUCT SOLUTION BY GROWING CONDITION

Condition	Solution
Nitrogen (N) High	Copron Soil, Copron Foliar, MicroBlend Foliar Zn-Mn-Cu
Phosphorus (P) Low	Phosron Soil, Phosron Foliar
Phosphorus (P) High	PhotoGreen Soil, PhotoGreen Foliar, Zicron Soil, Zicron Foliar, Manron Soil, Manron Foliar, Copron Soil, Copron Foliar, MicroBlend Foliar Zn-Mn-Cu
Potassium (K2O) High	GreenSurge Foliar, Calron Soil, Cellmate Foliar, BounceBack Foliar
Calcium (Ca) Low	Calron Soil, CellMate Foliar, BounceBack Foliar
Calcium (Ca) High	GreenSurge Foliar
Magnesium (Mg) Low	GreenSurge Foliar
Magnesium (Mg) High	Calron Soil, CellMate Foliar, BounceBack Foliar
Sulfate (SO4) High	Calron Soil, CellMate Foliar, BounceBack Foliar
Sodium (Na) High	Transit Soil, FBS Humate Plus, Calron Soil
Boron (B) Low	BoronBoost Soil, Boron Boost Foliar, CellMate Foliar
Boron (B) High	Calron Soil, BounceBack Foliar
Copper (Cu) Low	Copron Soil, Copron Soil
Copper (Cu) High	Phosron Soil, Phosron Foliar
Iron (Fe) Low	PhotoGreen Soil, PhotoGreen Foliar
Iron (Fe) High	Zicron Soil, Zicron Foliar, ZiCAN Soil
Manganese (Mn) Low	Manron Soil, Manron Foliar
Manganese (Mn) High	Phosron Soil, Phosron Foliar
Zinc (Zn) Low	Zicron Soil, Zicron Foliar, ZiCAN Soil
Zinc (Zn) High	PhotoGreen Soil, PhotoGreen Foliar, Manron Soil, Manron Foliar, Phosron Soil, Phosron Soil
Micronutrients Low	MicroBlend Foliar Zn-Mn-Cu, MicroBlend Foliar Zn-Mn-B, Citros Foliar
Silicon (Si) High	Calron Soil, CellMate Foliar, BounceBack Foliar
Chloride (Cl) High	Transit Soil, Transit Foliar, FBS Humate Plus
Acidifier (Tank Buffer)	FBS Harmony
Compatibility Aid (Tank Mixing)	FBS Marshal

Condition	Solution
Bicarbonates HCO3 High	Transit Soil, Transit Foliar, FBS Humate Plus, PhotoGreen Foliar
"Hydrogen (H) Percent Base Saturation High"	FBS Humate Plus, Transit Soil, Calron Soil
CEC Low	FBS Humate Plus, Transit Soil
Organic Matter Low	FBS Humate Plus, Transit Soil
Organic Matter High	FBS Humate Plus, Transit Soil
Light Sandy Soils	FBS Humate Plus, Transit Soil
Heavy Clay Soils	FBS Humate Plus, Transit Soil
Soil Conditioning	FBS Humate Plus
Alternate Bearing	Transit Soil, Transit Foliar, FBS Humate Plus
Bud/Blossom Set	MicroBlend Foliar Zn-Mn-Cu, MicroBlend Foliar Zn-Mn-B, BoronBoost Foliar, CellMate Foliar
Bulking	Calron Soil, BounceBack Foliar, Cellmate Foliar
Chlorosis	GreenSurge Foliar, Manron Foliar, PhotoGreen Foliar, Zicron Foliar, MicroBlend Foliar Zn-Mn-Cu, MicroBlend Foliar Zn-Mn-B
Cold Stress	Phosron Soil, Phosron Foliar, FBS Humate Plus, Transit Soil, Transit Foliar
Crop Damage	Phosron Soil, Phosron Foliar, FBS Humate Plus, Transit Soil, Transit Foliar
Drought Stress	Transit Soil, Transit Foliar, FBS Humate Plus
Fungal Disease	Carbon Defense
Heat Stress	BounceBack Foliar, Transit Foliar
Lignin Synthesis	Copron Soil, Copron Foliar, MicroBlend Foliar Zn-Mn-Cu
Moisture Stress	FBS Humate Plus, Transit Foliar
Nutrient Use Efficiency (NUE)	Transit Soil, Transit Foliar, FBS Organics Transit Soil, FBS Humate Plus
Pesticide Residue/Damage	FBS Humate Plus, Transit Soil
Plant Health/Strength	Transit Soil, Transit Foliar, FBS Humate Plus
Rooting Enhancement	Transit Soil, FBS Humate Plus
Salt Stress	Transit Soil, Transit Foliar, FBS Humate Plus

Verify these conditions with soil and tissue testing accompanied by field inspections.