UNIVERSITY OF
MARYLAND
EXTENSION

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Bramble and Blueberry Site Preparation

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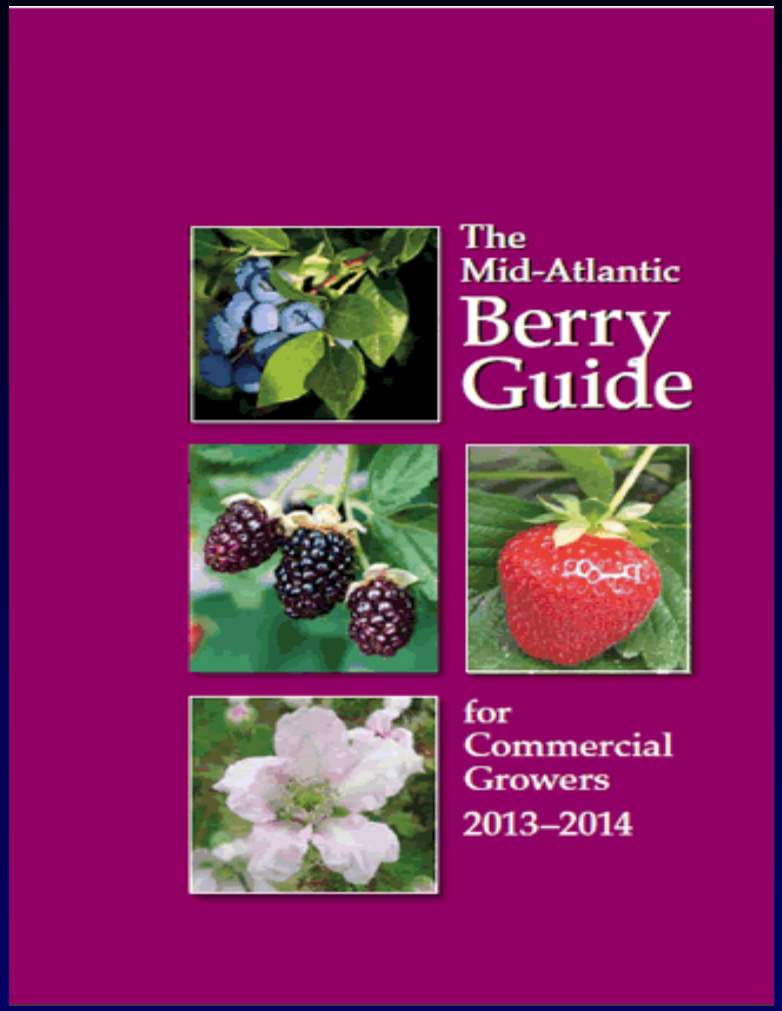
Site Preparation

The Mid-Atlantic Berry Guide



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Solutions in your community

Choose a Favorable Site

- Excellent drainage - no wet feet!
- Full sun
- Air circulation that promotes rapid drying of plants
  - Plant rows in the direction of prevailing winds
  - In warmer areas, plant brambles on north-facing slopes to avoid solar heating in winter
- Access to water for irrigation

Site Preparation

Choose a Favorable Site

Compatible cropping history

- No history of Phytophthora root rot
- No history of Verticillium wilt (5–10 yrs) or recent planting of susceptible crops
  - brambles, strawbs, tomatoes, peppers, potatoes)
- No recent history of crown gall (2–3 yrs)
- No nearby bramble plantings or wild brambles that cannot be removed
  - 500–1000-foot buffer

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Solutions in your community

Prepare the Site

- Test for harmful nematodes
  - dagger and root-lesion nematodes
    - Reduce populations by bio-renovation or fumigation
- Soil Test
  - Adjust pH
    - 5.8 to 6.5 is optimum for brambles
    - 4.5-5.0 (4.8) is optimum for bluebs
  - Organic matter (4–6% is ideal)
    - add “green manure” or compost as needed
  - Nutrients- P, K, Ca, Mg, B
- Control perennial weeds!

Bio-Renovation Program

https://extension.umd.edu/sites/extension.umd.edu/files/_docs/programs/viticulture/Pre-plantRenovationSoilCondNewVineYard.pdf

- Increase organic matter
  - Nutrition
    - Nitrogen and nutrient holding capacity
  - Herbicide efficacy
- Reduction/elimination of residual herbicides
  - adsorption of herbicides
- Reduction of plant pathogenic nematodes
  - direct competition
  - vector of virus diseases
- Manage perennial weeds

Site Preparation

Bio-Renovation Program

Sudex

Dwarf Essex Rapeseed

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Solutions in your community

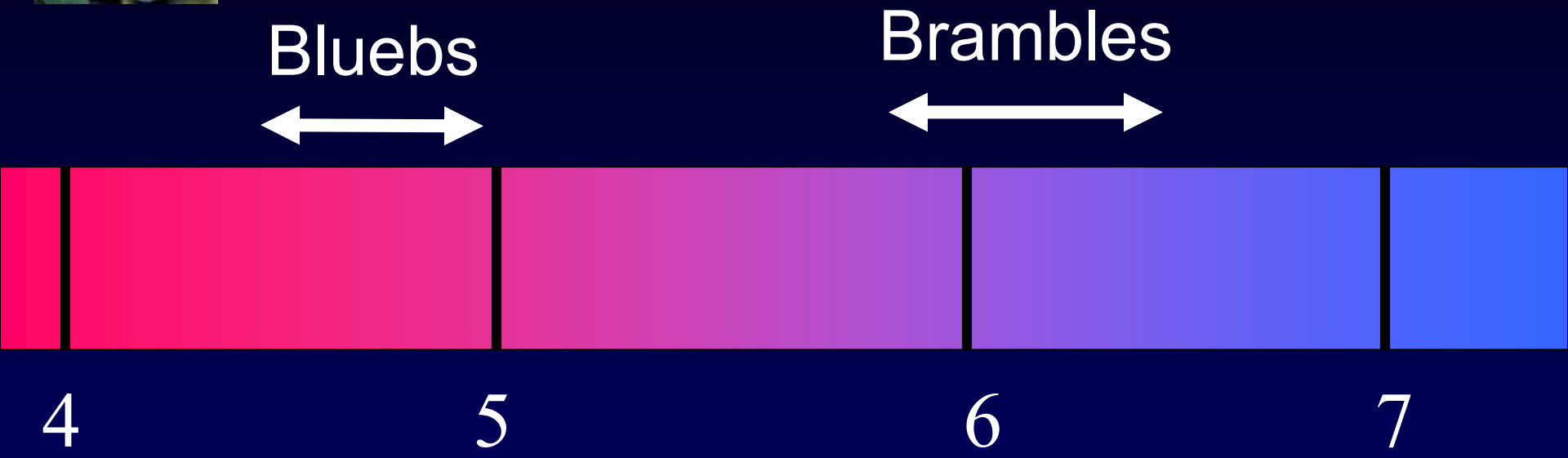
Soil Testing

- Measures potentially available nutrients
- Measures pH, P, K, Ca, Mg
- Specify boron test if sandy soil
- Other tests available
  - But without interpretation of results
- Always test before planting
  - Preferably the Fall before planting
    - Develop Nutrient management plan
  - Allows time for lime to react

Soil pH

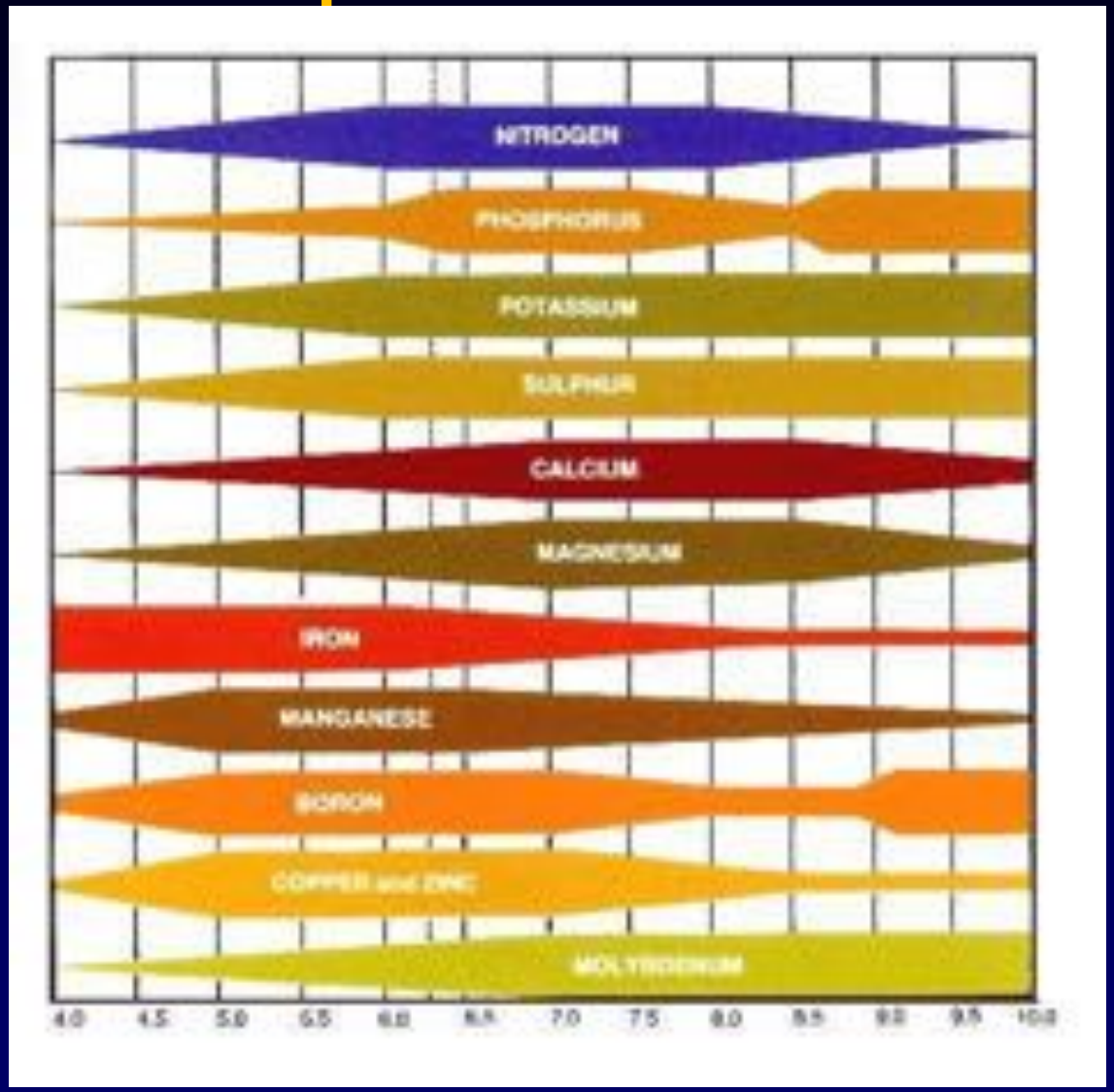
- 6.0 to 6.5 is optimum
- Lower than this, macronutrients (phosphorus, potassium, calcium, magnesium) less available
- Higher than this, micronutrients (iron, manganese, copper and zinc) less available

Optimum pH Ranges



1. Lime according to soil tests (annually?)
2. Use dolomitic lime if Mg is low
3. Apply and incorporate a year before planting

Soil pH and Nutrient Availability



Adjusting pH

- If calcium level is low or magnesium levels sufficient, use calcitic lime
- If magnesium levels low use dolomitic lime
- Sulfur used to adjust down (bluebs)
- Fall application
- Works slowly!
  - incorporate

Lowering Soil pH

- Elemental Sulfur is most often used to lower soil pH to 4.5-4.8 range
- Apply 6-12 months in advance of planting
- Incorporate in top 6-8 inches of soil
  - Preferable to do WHOLE plot – not just planting hole or row

Table 7.1. Amount of sulfur required to lower the soil pH.*

	Target pH of Soil					
		4.5			5.0	
Present pH of Soil	Sand	Loam (lbs/acre)	Clay	Sand	Loam (lbs/acre)	Clay
4.5	0	0	0	—	—	—
5.0	175	520	610	0	0	0
5.5	350	1,050	1,130	175	520	610
6.0	520	1,520	1,610	350	1,050	1,130
6.5	650	2,000	2,090	520	1,520	1,610
7.0	830	2,530	2,610	650	2,000	2,090
7.5	1,000	3,010	3,090	830	2,530	2,610

*Iron sulfate may be used at eight times the above rates.

Small Fruit Site Preparation

Mange weeds BEFORE You plant!

Nitrogen Nutrition (lbs of N/Acre)

Type	Year	Irrigated Clay-Loam-Sand	Non-Irrigated Clay-Loam-Sand
Primo Red Rasp	1	25–30-40	25-30-35
Flori Red Rasp Blackberries	1	25-30-35	25-25-30
Flori Purp Rasp Flori Black Rasp	1	25-25-30	20-20-25

(Table 8.5 Mid-Atlantic Berry Guide; Brambles p.179)

Spacing: 5’ x 12’

Dependent upon equipment size and variety


04/14/2005


04/14/2005

Peat moss is added to the planting hole at a rate of 50/50 rate of soil/P moss.


04/14/2005

Site Preparation

Raised Beds
Plastic mulch
Drip Irrigation

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