Appendix D: Maryland Fertility Index Value Soil Test Category

| Table D-1. Determining University of Maryland Soil Test Category | | | | | | | |
|--|--------------------------------------|--------------------------|--------------|-----------------------|--|--|--|
| Laboratory | Units Reported | Extraction Method | Lab P Result | MD Soil Test Category | | | |
| A & L Eastern | ppm | Mehlich-3 | 0-21 | low | | | |
| | | | 22-44 | medium | | | |
| | | | 45-90 | optimum | | | |
| | | | 91+ | excessive | | | |
| Agri Analysis: | Ib P ₂ O ₅ /ac | Mehlich-3 | 0-81 | low | | | |
| Use P_2O_5 value | | | 82-193 | medium | | | |
| | | | 194-415 | optimum | | | |
| | | | 416+ | excessive | | | |
| AgroLab | ppm | Mehlich-3 | 0-21 | low | | | |
| | | | 22-44 | medium | | | |
| | | | 45-90 | optimum | | | |
| | | | 91+ | excessive | | | |
| Brookside: | ppm | Mehlich-3 | 0-18 | low | | | |
| Use easily extractable P, ppm P | | | 19-39 | medium | | | |
| | | | 40-81 | optimum | | | |
| | | | 82+ | excessive | | | |
| Brookside: | lb/ac | Mehlich-3 | 0-84 | low | | | |
| Use easily extractable P, lb/ac P as $\mathrm{P_2O}_5$ | | | 85-181 | medium | | | |
| | | | 182-373 | optimum | | | |
| | | | 374+ | excessive | | | |
| CLC | lb P/ac | Bray 1 | 0-22 | low | | | |
| | | | 23-52 | medium | | | |
| | | | 53-111 | optimum | | | |
| | | | 112+ | excessive | | | |
| Harris: | ppm | Bray 1 | 0-10 | low | | | |
| Make sure lab knows sample is from MD | | | 11-27 | medium | | | |
| | | | 28-60 | optimum | | | |
| | | | 61+ | excessive | | | |
| Logan | lb P ₂ O ₅ /ac | Mehlich-3 | 0-84 | low | | | |
| | 20 | | 85-181 | medium | | | |
| | | | 182-373 | optimum | | | |
| | | | 374+ | excessive | | | |
| Penn State | ppm P | Mehlich-3 | 0-16 | low | | | |
| | | | 17-39 | medium | | | |
| | | | 40-84 | optimum | | | |
| | | | 85+ | excessive | | | |
| Spectrum Analytic | ppm | Mehlich-3 | 0-15 | low | | | |
| | | | 16-39 | medium | | | |
| | | | 40-86 | optimum | | | |
| | | | 87+ | excessive | | | |

Appendix D: Maryland Fertility Index Value Soil Test Category (continued)

| Table D-1. Determining University of Maryland Soil Test Category (continued) | | | | | | |
|--|----------------|--------------------------|--------------|-----------------------|--|--|
| Laboratory | Units Reported | Extraction Method | Lab P Result | MD Soil Test Category | | |
| Spectrum Analytic | lb/ac | Mechlich-3 | 0-21 | low | | |
| | | | 22-54 | medium | | |
| | | | 55-121 | optimum | | |
| | | | 122+ | excessive | | |
| University of Delaware | P Index | Mehlich-3 | 0-18 | low | | |
| | | | 19-43 | medium | | |
| | | | 44-92 | optimum | | |
| | | | 93+ | excessive | | |
| VA Tech | lbs P/ac | Mehlich-1 | 0-18 | low | | |
| | | | 19-39 | medium | | |
| | | | 40-81 | optimum | | |
| | | | 82+ | excessive | | |
| Waters | lbs P/ac | Mehlich-1 | 0-18 | low | | |
| | | | 19-39 | medium | | |
| | | | 40-81 | optimum | | |
| | | | 82+ | excessive | | |

Use the following steps to determine the University of Maryland's soil test category.

- 1. Find the phosphorus value reported by the lab (column one).
- 2. If more than one result is reported for phosphorus, use the value reported in the units listed in column two, Units Reported, for the lab used.
- 3. If an extraction method is reported, it should match the method listed in column 3, Extraction Method, for the lab used.
- 4. Find the range of numbers in column four, Lab P Result, that includes the phosphorus value reported.
- 5. Follow that line over to the right. The final column, MD Soil Test Category, will tell you the corresponding University of Maryland soil test category.
- 6. Phosphorus recommendations are based upon UMD's soil test category.

This document has been adapted from the University of Maryland Extension publication SFM 4, *Converting Among Soil Test Analyses Frequently Used in Maryland*, revised August 2006.