# Current PFGC Officers, Board

HERSHEY (Dauphin Co.) — The following is a list of the current officers and board of directors of the PFGC. If you have questions, concerns or suggestions on how the PFGC could serve you better, contact one of these people.

**Officers**

| | | |
|---|---|---|
| President | Paul Craig | (717) 921-8803 |
| Sec.-Treas. | Richard Hann | (717) 534-3507 |
| Exec. Vice Pres. | Marvin Hall | (814) 863-1019 |

**Board of Directors**

| | |
|---|---|
| Producer | |
| John Thompson* | (412) 533-3282 |
| David Hileman | (814) 684-1498 |
| Edgar Rits | (717) 734-3745 |
| Public | |
| Paul Craig* | (717) 921-8803 |
| Duane Pysher | (717) 782-4458 |
| Craig Williams | (717) 724-9120 |
| Industry | |
| Richard Adams* | (717) 355-3655 |
| Ed Koncle | (717) 299-2571 |
| Richard Kauffman | (717) 653-9381 |

*last year of current term

PFGC ❖ SPECIAL REPORT ❖

## INFLUENCE OF SOIL TEXTURE ON ALFALFA AUTOTOXICITY

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A rotation interval is recommended between alfalfa stands to avoid negative effects of autotoxicity. Differences in soil properties such as texture can strongly influence allelopathic expression in plants and may explain the large variation in research results and recommended rotation intervals among states.

A laboratory experiment was conducted to determine the influence of soil texture on alfalfa autotoxicity. Alfalfa extracts were passed through leaching columns filled with topsoil of either Sarpy fine sandy loam or Carlow silty clay foam and leachates were collected. Leachates were added to 50 alfalfa seed in petri dishes.

Radicle length and percentage germination were measured after 3 days. Leachates reduced radicle growth more than percentage germination in both soils. The autotoxic chemical or chemicals moved through the Sarpy soil faster than through the Carlow soil.

Fifty percent more water was required to move the autotoxic leachate through the clay-foam than the sandy-loam soil. The results indicate that similar amounts of the autotoxic factor in sandy soil will have a greater influence on alfalfa seedling growth than in the clay soil.

Conversely, the same amount of rainfall will leach the autotoxic factor from a sandy soil while only diluting it in a clay soil. Soil texture and rain water interact to affect length of rotation intervals needed for successful reseeding of alfalfa.

Field research is needed to determine if rotation intervals can be modified based on soil texture and irrigation or expected rainfall.