GARY PASTUSHOK - Williamson County - County Extension Agent PROFESSIONAL SUMMARY

- Texas A&M AgriLife Extension Williamson County CEA Agriculture & Natural Resources
- Agricultural Chemical Senior Research Scientist/Professional Agronomist,
- ND State Plant Industry Branch Director
- Broad Scientific background in Botany, Soils, Agricultural Crops, Forestry and Horticulture

Accomplished agricultural and biological research scientist in the Crop Protection industry for many years, North Dakota State Ag Plant Division Director; and over the last 5 years as the County Extension Agent - Ag/NR in Williamson County.

In the absence of a Horticultural agent, I assisted the Master Gardener Group and their Help Desk Team regarding site investigations and many other horticultural queries from our Wilco residents. Worked for several of the world's premiere Agricultural Chemical companies as an R&D Senior Research Scientist in both the USA and Canada, and in a regulatory capacity role for State and Provincial Agencies in the USA and Canada. Developed excellent working relationships and brought my broad agronomic expertise to collaborate in cross-functional domestic and international working groups to develop a diverse range of new crop protection products.

Have hands-on working experiences in a wide swath of agricultural and horticultural crops including cereals, oilseeds and legumes, rangeland, forestry, soils, hemp, biofuels, soybean, corn, sugar beets, potatoes, hemp, fruits and grape, nursery and vegetable production. Collaborated with the Seeds Industry in plant variety development and efficacy testing of a range of seed treatment products.

Experienced in ecological vegetation characterization, assessment and management of Sphagnum bog resources, and forestry environments (Forest Nursery and Natural Resource sectors). Comfortable in teaching grade school students/teachers on agriculture, biology and forest ecology and conservation activities.

EDUCATION

• Master of Science in Agriculture - Soil Science – University of Saskatchewan 1982 Thesis Title; "Incorporation of Triallate Granules"

Wild oat management project between the Soil and Crop Science Departments

• Bachelor of Science - Botany - University of Manitoba 1977. Plant Ecology

KEY STRENGTHS

Highly Skilled Agricultural, Botanical and Natural Resource Specialist. Technical expert in the conduct of herbicide, insecticide, fungicide, entomology, seed treatment, growth regulators, soil studies and GLP Regulatory Trials (APHIS and EPN & PMRA), including Pesticide Applications and Field/Greenhouse Pathogen and Entomological Inoculation Techniques. Skilled in scientific report writing, label

management for State/University Extension Pesticide recommendations. Strongly collaborative and organized; very capable of actively managing large and very diverse programs. Take pride in training and educating clients on pest control. Oversight and distribution of large grants in industry (up to \$600K/yr) to assist in various collaborative programs with external Federal, University and Private Contractors, and Agencies in the USA and Canada. Received accolades for scientific excellence in the development of Genetically modified crops, Regulatory and Research and Development trials. Recognized within TAMU for Innovative Programming on the *Science Behind Breadmaking*; collaborations with County and Statewide Specialists on the agronomics of growing Hemp and developing Biofuel oilseed crops (Carinata) and had just recently received the statewide Soils and Crop Science *Special Achievement Award for TAMU Extension Faculty* in 2023.

RESULTS DRIVEN AND INNOVATIVE.

Developed a deep base of agronomic experiences in project management, generating efficacy data, product label writing management, Regulatory and Environmental studies, and Product Sales-Support experiences. Very familiar with the production of crops grown across the USA and Canada. Developed hundreds of field protocols and detailed project summaries. Work well under tight timelines and long hours over a wide geography.

Experience in leading a team of biological specialists involved in plant nursery and commodity inspections, noxious weed management, investigating soil pathogens, weed-free forages, apiary and commodity export certifications, and developing a pilot program on Industrial Hemp. Worked closely with USDA-ARS to manage invasive species such as emerald ash borer imported on quarantined firewood, and Japanese beetles harbored on infested nursery stock. Conducted field and nursery inspection surveys and monitored for exotic insects in natural forest environments, and for Japanese beetle in nursery stock.

DETAILED WORK EXPERIENCES Plant Industries Division Director - North Dakota Dept Agriculture 2016-17

Responsible for State regulatory efforts including horticultural nursery inspections, invasive weed/pathogen/insect pest surveys, certifying and licensing facilities exporting highly- refined commodities; running the on-farm industrial hemp pilot program, noxious-weed management program, apiary licensing efforts, and weed-free forage certifications.

Collaborated with USDA-ARS APHIS and State Scientists on invasive species management. Invasive species management included the emerald ash borer, sugar beet nematode, Palmer amaranth in contaminated seed lots, Japanese beetles in containerized nursery stock and in infested firewood and developing a strategy to contain Club root disease in soils.

Investigated apiary operations and advanced litigation proceedings; monitored illegal cross border transport of ash borer infested firewood, conducting exotic pest surveys and nursery inspections, trapping Japanese beetles in nurseries, collaborated with Minnesota Agon noxious weed (Palmer amaranth) seed contaminants in NRCS conservation seed mixtures. Conducted facility inspections and generated reports on findings. Authored the technical report for the industrial hemp pilot program.

Senior Scientist -- SYNGENTA Crop Protection [MN, ND, MT] 2001-15

Designed and implemented Field and Greenhouse R&D and Marketing Support Trials on proprietary agricultural products. Pesticide efficacy testing included herbicides, seed treatments, fungicides, insecticides and plant growth regulators. Developed inoculated/infested techniques to evaluate performance against a range of agronomic pests.

GLP APHIS Regulatory field trial coordinator (FPC) – worked with counterparts on the development of GMO crops, including wheat, soybeans, canola, legumes and corn. Experienced in applications and sampling soils and plant materials under Federal Regulatory Agency oversite to determine the dissipation of pesticides in the environment.

Hired and trained many University interns. Developed R&D protocols and administered Sales Support funds to support research with Federal and State Scientists in North Dakota, Montana, South Dakota and Minnesota. Ran a large and diverse annual workload of over 120 individual trials/yr supported by an external funding budget of up to \$600K. Responsible for reviewing and updating the Product recommendations for State Extension Publications.

Lead Field Scientist for product development studies in spring cereals and pulse crops. Special emphasis on testing programs for foliar disease management with fungicides, and control of seed /soil borne pathogens and insects. Field project coordinator for up to 26 projects per year on pulse crops, canola, sugar beet, potatoes and spring cereals. Coordinated trials and common protocols with Canadian Scientists and Discovery Teams in the EU.

Senior Field Biologist/Field Scientist - ZENECA Ag Products (USA, Canada) 1988-2001

Ran a large efficacy and GLP regulatory field program in Canada. Lead several business-critical projects on developing new herbicides and fungicides in consort with EU Scientists. Directly managed 2-4 field interns/year.

Promoted to Senior Scientist and transferred to USA in 1999. Territory included all or parts of MT, ND, SD and MN. Responsible for Technical Presentation launches of new graminicides and foliar/seed treatments across a wide range of crops including beets, potatoes cereals, pulses and canola. Other responsibilities included assisting on field promotion demonstrations, venues/training for Sales, Growers and University Extension. Investigated several large product complaints and aerial drift issues.

USA rep to the Canada Regulatory Group - GLP Delegate, and to the Herbicide Resistance Action Committee (HRAC-FOP/DIM Sub-Group).

Western Canada Technical Rep ● Stauffer Chemicals (Canada) 1985-87

Technical Specialist for Western Canada.

Key responsibilities were to develop the entire Field R&D and Sales Support program for Western Canada, including all internal and external trials; train summer interns, and compile project data summaries for product registrations and make technical presentations.

Technical expert for grower Performance Inquiries/Complaints. Involved in confrontational situations with growers involving product failures for our National Distributor. Developed new expertise working on row crops (potatoes, forages, corn, veggies, vines, and fruit trees).

Technical Representative ● BAYER Crop Science (Canada) 1980 • 85

Product Development, Field R&D and GLP Regulatory Trial specialist conducting Residue and Environmental Fate, and Exploratory field trials over a wide range of pesticide products

Established Sales Support Training Demos, handled complaints and cold calls, manned trade show booths, and made many technical presentations to growers and dealers; made professional society presentations at the Weed Science Society (WSSA) and Expert Committee on Weeds (ECW); and to University Extension and Government Influencers.

Developed strong technical expertise in the conduct of pest management trials in specialty (Pulse) crops, canola and cereals on seed treatments, entomology, fungicides, and weed control. Gained additional experiences on pest control in vegetables, grapes and tree fruits in British Columbia.

JOURNAL PUBLICATIONS

Incorporation of triallate granules for wild oat control under dry conditions.
 Soil and Tillage Research. 11/1985; 6(2):139-147.

• Triallate granules for wild oat control in dry soil. J Env Science and Health A01/1985;20(4):419-426.

OTHER RELEVANT WORK EXPERIENCES

- Williamson County Farm Bureau Board Member
- Williamson County FSA Board Member
- Weed-ID Lab Assistant Plant Taxonomy Crop Science Department, University of Saskatchewan
- Herbarium Assistant Assisted the Botanist with Plant collections Department Botany, University of Manitoba
- Peat Bog Resources Plant Survey Manitoba Government, Geology Branch
 Sphagnum identification, peat quality, soil core sampling and analysis of soil cores
- Conservation Instructor Manitoba Forestry Association. Instructor to Teachers and Secondary Students in plant ecology, conservation, forest fire detection and suppression techniques, and tree nursery production

OTHER INTERESTS/ ACTIVITIES

- Outdoor pursuits including Horticulture, Camping, Hiking, Travel, Fly-fishing and Exploring
- Ranked Table Tennis Player and Coach
- State, Provincial, National Medalist