



Academic Soil Science Training in Different Countries

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People who identify as soil scientists work in countries around the world, but what fields do these professionals obtain their credentials in and are those fields uniform from one country to another or do they vary by country? We undertook investigations in eight countries, Australia, Brazil, Canada, Israel, Japan, South Africa, the United Kingdom, and the United States of America, to explore these questions. Definite differences were found between countries. In Australia, the most common route to a soil science career was through Environmental Science programs, followed by Agriculture and Agronomy programs. The USA was similar, with Agriculture and Agronomy programs being the most common path followed by Environmental Science. Training through Agriculture and Agronomy and Environmental Science programs was also common in the United Kingdom, but with a significant proportion also in geosciences (geography). Brazilian undergraduate degrees were dominated by Agriculture and Agronomy programs, with training through Forestry programs also common. By contrast, training did not occur through undergraduate Agricultural and Agronomy programs in Israel and was relatively uncommon in Canada. The most common degree paths in Canada were Geosciences and Environmental Science, while training in Israel occurred in Soil Science/Soil and Water Science and Civil and Environmental Engineering programs. South African training was primarily in Soil Science/Soil and Water Science and Agriculture and Agronomy programs. There were no undergraduate programs in Japan that prepared students for careers in soil science. The results of our study show that the agriculture and agronomy link to soil science is strong in many countries, as shown by the common pursuit of degrees in these areas to train as a soil scientist. However, the results show that this link is not universal, and that soil science also has strong links to a number of other fields, including environmental sciences, forestry and geosciences, at least in select countries. Some countries, particularly Israel and South Africa, also had a strong focus on stand-alone soil science or soil and water science degrees. The wide range of academic training pursued by people who are seeking careers as a soil scientist shows that there is not universal agreement on where soil science fits within the academic landscape.