Protocol for sampling surfaces and air at houses

Surface sampling was carried out using 15cm x 15cm Ghost wipes (CAT#4210, Environmental Express). Two surfaces inside the house and two surfaces on the exterior of the house were swiped. Using the wipe area template (100 cm2), a selected area was wiped with a ghost wipe, which was saved in a plastic tube at -80º C until analysis. To avoid contamination, new latex gloves were used for each sampling.

Air sampling was carried out both inside and outside the house using a SASS® 2300 Wetted-Wall  Air Sampler (Research International, Inc.). The SASS® 2300 is an efficient, multistage cyclone sampler for extracting particulates and water-soluble chemical vapors from the air. Its air collection rate is > 300 LPM and it is suitable for a 0.5-10 µm particulate size range. The collection time for each sample was one hour, and each sample (4-5 ml) was saved at -80º C till analysis.

Analysis of all samples for selected neonicotinoid insecticides, fungicides and their transformation products was carried out in the Water Science Laboratory at UNL.