In 2015 and 2016, Washington field grown ‘Cinnamon Girl’ pumpkin leaves and fruit exhibited lesions surrounded by a yellow halo, and wart-like eruptions, respectively. Symptoms were reminiscent of bacterial infections, but atypical of those caused by *Pseudomonas syringae* pv. *lachrymans*, the angular leaf spot pathogen assigned to genomospecies 2, phylogroup 1. Pathogenicity of PsAs_2015 isolated from foliage and PsFt1_2015 and PsFt2_2015 from fruit was confirmed on pumpkin seedlings, and the LOPAT profile corresponded to *P. syringae*. A multilocus sequence analysis with *P. syringae* pathotypes, demonstrated that PsAs_2015, PsFt1_2015 and PsFt2_2015 are genetically identical and members of genomospecies 1 phylogroup 2B, and thus not related to *P. syringae* pv. *lachrymans*. Of the genomospecies 1 pathotypes and PsAs_2015, only PsAs_2015, and *P. syringae* pv. *aptata* were pathogenic on pumpkin leaves, although *P. syringae* pv. *aptata* lesions were distinct from those of PsAs_2015. PsAs_2015 did not cause symptoms on beet seedlings whereas *P. syringae* pv. *aptata* did. ‘Baby Boo’ pumpkins were either seed, flower, or fruit inoculated with PsAs_2015, or non-inoculated to assess how inoculation timing affects symptoms on fruit. Wart incidence on fruit was significantly correlated with fruit inoculation (P≤0.001) as was recovery of PsAs_2015 from symptomatic rinds (P≤0.001). Warts on fruit represent a newly observed symptom, likely not the result of systemic infection.