R worksheet (based on Hayes [2009], Introductory Phonology)

These are words from a language with two different rhotic sounds. There is [ι] (a voiced alveolar approximant like the American English r), and [ι ^w] (almost the same sound, but produced with lip rounding: your lips make a round shape just like when you pronounce [ι]).

[maɪgɹ ^w ənts]	[hoʊmɛɹ ^w ɪk]	[fɛldspaɹ]
[rc]	[tɹ ^w ɛk]	[ku]e]
[fu ^w ʌm]	[dibɹ ^w ɪft]	[leʔbɜʷkb]
[[aɪɹ]	[ɪslqiʷɹ]	[ntlcwb]
[tɹʷɪplɪŋ]	[iɹʷaki]	[fiɹ]
[ucfetam]	[b ₁ meɪz]	[fɛbjuɛɹʷi]
[ɪɹʷɪdiəm]	[betnæ ^w د]	[ilənemɪwskɹsənətli]
[zinevɪlאʊoʷkq]	[kɹʷusəbəl]	[ɹʷoʊmænsɪŋ]

Do native speakers of this language consider these two rhotics to be different sounds (i.e., different phonemes)? Why or why not? Explain your evidence, and present an analysis that describes the relation between these rhotics using rules and tree diagrams.

What language are these words from?