Table 1. Recognition results of pitch and vowel quality tested for opposing sounds of a D-pattern without and with full attenuation of H1 (vowel recognition = 2 subtests with 10 identifications, pitch recognition = 1 test with 5 identifications; see Method section). Columns 1–3 = sound production (S=series number, fo=fundamental frequency in Hz, V=vowel quality intended). Columns 4–8 = harmonic configuration of synthesis (H1=fundamental, AH1=attenuation of H1, D(i)=dominant harmonics, approximate values in Hz). Columns 9–14 = recognised vowel qualities (total of both tests). Columns 15–16 = recognised pitch level for the comparison of sounds related to a D-pattern without and with full attenuation of H1. – Recognition rates ≥ 80% of mid-closed vowels and/or of low pitch is highlighted in blue, and recognition rates ≥ 80% of closed vowels and/or of high pitch is highlighted in red.

| Natural sound | | | Harmonic synthesis | | | | | | Vowel recognition | | | | | | | Pitch recognition | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S | $f_o$ | V | H1 | AH1 | D1 | D2 | D3 | | o | ø | e | u | y | i | | low | high |
| 1 | 220 | e | 220 | 0 | 440 | 2640 | 3080 | | | | 10 | | | | | 5 | |
| | | | − | -100 | | | | | | | | | | 10 | | | 5 |
| 2 | 250 | e | 250 | 0 | 500 | 2500 | 3000 | | | 1 | 9 | | | | | 5 | |
| | | | − | -100 | | | | | | | 1 | | | 9 | | | 5 |
| 3 | 220 | ø | 220 | 0 | 440 | 1760 | 2640 | | | 10 | | | | | | 5 | |
| | | | − | -100 | | | | | | | | | 10 | | | | 5 |
| 4 | 220 | ø | 220 | 0 | 440 | 1760 | 2640 | | | 10 | | | | | | 5 | |
| | | | − | -100 | | | | | | 1 | | | 9 | | | | 5 |
| 5 | 220 | o | 220 | 0 | 440 | 880 | − | | 10 | | | | | | | 5 | |
| | | | − | -100 | | | | | | | | 10 | | | | | 5 |
| 6 | 220 | o | 220 | 0 | 440 | 880 | − | | 8 | | | 2 | | | | 5 | |
| | | | − | -100 | | | | | | | | 10 | | | | | 5 |