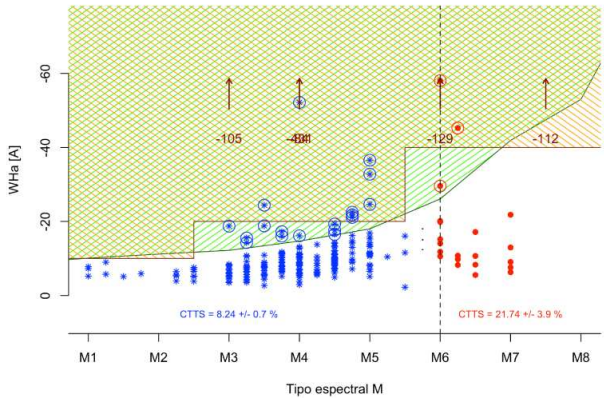

Fig. 5. Equivalent width of Hα line in emission as a function of spectral type. Objects placed above the limit defined by Baraffe et al. (1998) (solid lines) are CTTS.

et al. 2007b). The analysis of the spatial distribution of brown dwarfs and very low mass star shows non significant difference Downes et al. (2011, in prep.).

4.3. *Near infrared excesses, Classical and Weak T Tauri-like characteristics*

Using color-color magnitude diagram we compute the fraction of candidates showing infrared excesses at both sides of the sub-stellar limit. Additionally we measure the fraction of objects showing accretion signatures as we show in Figure 5. The fraction of VLMS with inner disks is ∼11% in OB1b and ∼3% in OB1a. The fraction of BDs with inner disks is ∼25% in OB1b and ∼9% in OB1a. The fraction of VLMS with accretion signatures is ∼8% in OB1b and ∼3% in OB1a. The fraction of BDs with accretion signatures is ∼20% in OB1b and ∼3% in OB1a.

5. CONCLUSIONS

We presented an overview of the last results of a deep photometric and spectroscopic survey for the very low mass and brown dwarf of the dispersed populations of Orion that will be discussed and compare with the predictions from brown dwarf formation models in Downes et al. (2011, in prep.). Summarizing, (*i*) from the spatial distribution of photometric candidates, we found that Orion OB1 extends from $\alpha \sim 79°$ to the east into the molecular clouds. Its western limit is defined by a mean overdensity composed by several small overdensities. We found there is not a global difference in the spatial distribution of BD and VLMS against the suggestions of the models of premature ejection of stellar embrios. (*ii*) The MF for Orion OB1a and OB1b can be described by a power law MF similar to the Pleiades (Lodieu et al. 2007). The later does not support the idea of a strong dependence of MF with the environmental conditions. Robust comparison with other MFs is still difficult due to observational biases. (*iii*) These inner disk fractions in brown dwarfs and its continuous behavior through the substellar limit do not support the ejection scenario. Consistent with observations of other star forming regions (e.g., Luhman et al. 2007). The results suggests that the fraction of inner disks decreases more quickly for BDs than for VLMS at ages between 3 and 7 Myr.

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