



**CALIFORNIA STATE SCIENCE FAIR  
2007 PROJECT SUMMARY**

<b>Name(s)</b> <b>Tessa A. Opalach</b>	<b>Project Number</b> <b>J1722</b>
<b>Project Title</b> <b>A Lotta Jubata</b>	
<b>Objectives/Goals</b> The prevalence of two related non-native species was examined and compared throughout Humboldt County. Both species are commonly known as pampas grass, but their scientific names are Cortaderia selloana and Cortaderia jubata. Background research suggested Cortaderia jubata would be the dominant of the two due to its reproductive strategy and growing range.	
<b>Abstract</b> The prevalence of two related non-native species was examined and compared throughout Humboldt County. Both species are commonly known as pampas grass, but their scientific names are Cortaderia selloana and Cortaderia jubata. Background research suggested Cortaderia jubata would be the dominant of the two due to its reproductive strategy and growing range.	
<b>Methods/Materials</b> Eight different pampas grass infested micro-environments were sampled. Within each infestation three 10x25 foot plots were marked with stakes and flagging. The two pampas grass species on each plot, if present, were counted in clumps and recorded on a plot card created for this study. Ranges of stem heights and tussock heights were also measured and recorded. All other plant species on the plot were identified and also recorded. For this study a Field Identification Guide was created using published literature and information downloaded from the internet. Its purpose was to aid in correctly identifying these two closely related pampas grass species.	
<b>Results</b> Every micro-environment was dominated by Cortaderia jubata as predicted. In fact, Cortaderia selloana was not found on any of the study plots. The stem height to tussock height ratios varied significantly, even more so than that reported in the literature. This could be because the micro-environments sampled included some extreme conditions.	
<b>Conclusions/Discussion</b> Although the literature says that Cortaderia selloana is a problematic invasive specie in Humboldt County, none was found in the pampas grass infestations sampled. The real problem in Humboldt County is Cortaderia jubata, hence the name of my study: #A Lotta Jubata.# To prevent Cortaderia selloana from becoming a huge problem it is recommended that any known plant of this specie should be removed so that it does not have a chance to reproduce.	
<b>Summary Statement</b> The prevalence of two related non-native species, commonly known as pampas grass, was examined and compared throughout Humboldt County.	
<b>Help Received</b> Father helped with graphing and identification of species; Mother helped with backboard design; Tony LaBanca helped with background research.	